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ABSTRACT

This guide to planning, producing, and disseminating instructional materials includes topics on (1) planning content and form; (2) planning personnel requirements, budget, and scheduling needs; (3) producing printed materials; (4) producing audiovisual materials; and (5) distribution. The main emphasis is on developing printed materials and on the distribution of the finished educational program. Marketing considerations such as pricing, inventory control, order and bill processing, and shipping, are all discussed. The appendix provides descriptions of support materials, including press releases, program descriptions, and brochures, as well as guidelines for developing student materials, instructor manuals, and community and parent guides. An extensive bibliography is provided. (BK)

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# *Guide To Packaging Your Educational Program*

*by*
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*Adapted from*
*"Packaging Your Educational Program"*
*by*
*Fred S. Rosenau and Diane H. McIntyre*

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# *Contents*


INTRODUCTION ..... 1

Planning Your Materials: An Overview ..... 3
The Main Tasks ..... 5

PLANNING CONTENT AND FORM ..... 7

What to Emphasize ..... 9
What to Include ..... 10
What Form to Use ..... 11
A Working Outline ..... 12
Doing a Good Job ..... 14

PLANNING PERSONNEL, BUDGET, AND SCHEDULE ..... 17

Selecting and Using Available Personnel ..... 19
Budgeting ..... 22
Scheduling ..... 25

PRODUCING PRINTED MATERIALS ..... 27

Comprehensive Layout: The Dummy ..... 29
Proofreading ..... 30
Setting Final Copy ..... 31
The Paste-Up ..... 32
Selecting Paper ..... 33
Printing ..... 34
Finishing and Binding ..... 37
Finishing Operations ..... 37

NOTES ON PRODUCING AUDIOVISUAL MATERIALS ..... 43

Deciding to Use Them ..... 45
Basic Planning ..... 46

DISTRIBUTION ..... 49

Setting the Price ..... 51
Creating and Maintaining Inventory ..... 54
Order Processing, Billing, and Handling ..... 55
Shipping ..... 56
Help from Outside ..... 56
Marketing Techniques ..... 59
Copyright Regulations ..... 59

APPENDIX ..... 61

RECOMMENDED READING FOR DIFFUSION AND PACKAGING ..... 87

# *Introduction*

This handbook is about packaging — planning, producing, and coordinating — a set of printed and audiovisual materials to aid in dissemination of an innovative and effective educational program. Materials are an important tool in dissemination, whether they are used to make a program known, to promote adoptions, or to help adoptions succeed. Good packaging means that a program's materials will be appealing, appropriate, and effective. Good packaging also means that these materials will be used.

## PLANNING YOUR MATERIALS: AN OVERVIEW

It is important first to sketch out an overall dissemination strategy so that you can accurately assess how materials can be used to help achieve your goals, how you can develop the best possible materials within the limitations of your resources, and how the development of materials will fit in with your other activities.

With proper planning, common pitfalls can be avoided. Many of the materials that are produced are poorly researched, prepared, and presented, and some are even unnecessary because they duplicate existing resources. Take time to discuss and answer the questions posed below before you begin.

*What is the purpose of the materials?*

Review the purposes that materials can serve, and decide which meet your dissemination needs. Dissemination materials have most often been developed to create awareness, to provide the training, instructional, and management information required for replication of a program, and to aid in evaluation.

*How do they fit in with my overall dissemination effort?*

Whatever purposes your set of materials is to serve, the set must fit within your overall dissemination effort. Some sets are developed to carry the major burden of providing information about a program, while some merely complement the activities of staff. That is, a set of materials can be designed as a self-contained unit to be used by an adopting district with little or no help from the developer, but a set can also be designed to augment the services of an experienced trainer.

Some projects develop a set of materials to cover every aspect of their program. Others develop materials to cover only specific features — an evaluation system with its computer program and coding schemes, for example.

After you've decided on the purpose that your materials will serve in relation to the other aspects of your dissemination effort, you'll be ready to determine the specific information that should be conveyed by your materials and the information that should be conveyed by other means.

*Who are the materials for?*

Keep in mind at all times the audience for whom your materials are intended so that you can design them accordingly. For example, awareness materials should have more general appeal than materials specifically for teachers. Try to work from the point of view of the anticipated user.

*What form is best?*

The materials that you choose to include in your set can take different forms. Different media and formats meet different needs. For example, a "self-mailer" brochure may be the most appropriate form for generating interest in your program, whereas a film may be best for training. The forms

that your materials take will depend on many factors, including your audience, budget, and schedule. (See pages 11–13 for a discussion of specific options.)

*Can I use existing materials?*

Before you develop any new materials, investigate whether similar products are currently available from either commercial or nonprofit sources. You may be able to incorporate existing materials into your set and save a great deal of time and money, or you may at least get some useful ideas. Your set could turn out to be a combination of materials that you have already developed as part of your program, new materials that you have designed yourself to assist adopters of your program, and materials developed by others (used with permission, of course).

*What will it cost? How long will it take? Who will do it?*

To plan a set of materials that will be feasible, draft a rough chart of the materials that you propose to develop, with topics to be covered in one column, intended audience in another, and possible forms in another, as in Figure 1. Try to estimate the length and quantity of each item required. Use this chart as a basis for organizing your effort, matching needs with resources (personnel, time, and money) and revising as you go.

*How can I know whether the materials will work?*

Plan for a trial run and evaluation of your set of materials. This evaluation can be as simple as a request for the opinions of a few potential adopters or as complex as a formally designed experiment. Whatever its form, the evaluation should come when the product is as nearly finished as possible, but there should also be enough time left in the schedule to allow for revisions based on evaluation results.

*Good examples*

Many well-planned sets of materials can serve as useful models for your own efforts. Studying the best of previous efforts can help you save time, avoid mistakes, and anticipate difficulties. But be cautious; the ideas that worked for another project may not be entirely appropriate for your program, or they may not be possible to realize with your budget.

FIGURE 1

*Proposed Materials*

| ITEM | TOPICS TO BE COVERED | AUDIENCE |
|---|---|---|
| Project Management Manual | Goals and objectives<br>Budget<br>Staff<br>Planning and scheduling<br>Materials required<br>Evaluation | Project director (can be teacher or administrator) |
| Classroom Manual | Day-to-day planning and management<br>Curriculum materials<br>Diagnosis of students' needs | Teachers<br>Resource personnel |
| Training Manual | Project goals<br>Preservice training<br>Inservice training<br>Follow-up activities<br>Materials | Project director<br>Lead teacher |

## THE MAIN TASKS

The sections that follow are guides to the main tasks in developing a set of dissemination materials: planning content and form; planning personnel, budget, and schedule; producing printed and audiovisual materials; and distribution.

# *Planning Content and Form*

This section is about deciding what to say and how best to say it. Your choice of both content and form should depend on the purposes you have designated for your materials, the intended audience, the features of your program, and the resources that your project may allocate to the production of materials.

The specific information included in a set of materials varies from program to program, but generally adopters (and potential adopters) need to know about these topics: project goals and objectives, classroom or course activities, training procedures and materials, school and community relationships, evaluation procedures and results, and program management. In one way or another, through personal contact or materials, these topics must be covered.

Form, too, is important. The most useful information is often overlooked if its format is not appropriate and if it is not attractive, well organized, and convenient to use.

## WHAT TO EMPHASIZE

When you prepare any materials, whether they are only introductory in nature or intended to provide detailed information on some aspect of program operation, some general points should be kept in mind.

*Highlight basic features*

Any materials that you develop should emphasize your program's basic features — those that make it work and those that distinguish it from others. Identifying the basic features of your own program isn't always easy, and someone from outside your project can often provide the objectivity needed. In addition, it is often helpful to have each member of your staff list the project's basic features from his or her own point of view. Compile a master list and use it as a guide, recognizing that it will be refined and altered as your work progresses.

*The user's point of view*

Work from the point of view of the anticipated user, but remember too that not all adopters will approach your program in the same way. As you work with different adopters, you'll find variations in their plans for using your program. Some will want their program to match yours as closely as possible, while others will want to modify it to meet special circumstances.

*Flexibility*

Emphasize flexibility, and present program operation in broad terms so that potential adopters will not be discouraged. A program should be thought of as a set of interrelated functions — responsibilities that must be assumed and tasks that must be performed to achieve results similar to those obtained by the originating project. Focus more on what has to be done and less on the specific individuals who have to do it. Suggest ways of accomplishing goals. For example, explain why lesson plans are needed, provide samples, and encourage adopters to generate their own plans by following these models. Provide a wide range of learning activities (explaining the specific purpose of each) so that adopters can choose among them. Indicate whether an adopter may choose to use single parts of your program rather than adopting the entire program and also whether individual parts may be adopted one by one rather than the whole program being adopted all at once.

Be sure that you have explained why each essential element of your program is truly necessary, then recognize that adopters will often want to reshape "your" program so that it becomes "theirs."

*Diverse advantages*

Emphasize the diverse advantages that your program can provide. Potential adopters are interested in financial and administrative benefits as well as in the program's potential for student achievement.

*Preview opportunities*

Indicate whether your program can be observed in action and tried out. Potential adopters will want to know that your program can be adapted to their own styles and situations without losing its essence and its benefit to students.

*And also...*

Other suggestions include the following: Choose examples of program features that have broad appeal. Be alert to national trends, and highlight any popular features in your program. If your project has been reviewed and approved by a state education agency, federal review panel, or other prestigious entity, say so. Emphasize positive evaluation data, but be concise. (You can offer to supply a complete set of figures on request.) Anticipate adopter questions, based on your own experience and also on field tests of your materials. Help potential adopters to anticipate problems by identifying the main difficulties that you have faced, as well as the solutions that have worked for you.

## WHAT TO INCLUDE

*A complete set and a minimal set*

A complete set of materials (that is, one that carries the major burden of a project's dissemination activity) should explain clearly the roles and activities of individual learners, those who will work with learners, those who will manage and coordinate the program, and those who will provide any external assistance that is needed. At the minimum, the set of materials that a project new to dissemination develops should contain management and classroom guides of some sort.

*Materials commonly produced*

The materials listed below are those commonly produced, either as separate items or as parts of a single item.

Audiovisual (slides, slide-tape, film, videotape, audiotape):

- overview of program
- training aids
- program operation demonstrations

Print:

- one-page project description
- awareness brochure
- press release
- detailed project description
- newsletter
- lists (services and costs; materials and prices; demonstration sites and trainers)
- evaluation results

- workshop syllabus
- training manual
- teacher's manual
- student materials
- project manager's manual
- community resources guide
- special audiences guide
- parents' guide
- posters
- special reports

Of course, most projects will not need or want to produce all of these. A few appropriate and well-prepared materials will prove far more effective than a variety of materials that are poorly planned and executed. Nor is it necessary to develop all materials before dissemination activities begin. When you are just starting out, aim to complete the most important items first. Additional materials may be developed as the need for them is demonstrated.

An inventory of materials that can make up a dissemination package is described, item by item, in the Appendix.

## WHAT FORM TO USE

In choosing the best form for your materials, you must as usual consider audience and content as well as project ability, time, energy, and money. Different forms meet different needs and have different requirements.

*Some examples*

Newsletters and calendars, for example, can communicate to a large group on a regular basis. They can be rather simple in appearance, and inexpensive to produce. Fancy graphics are not usually required here because the audience is presumably already interested in your project; basic communication of information is the main concern. However, these publications do require continuing effort, a regular staff coordinator, an up-to-date mailing list, and a simple, easy-to-read format that directs a reader to news of special interest.

Descriptive brochures, posters, and special reports, on the other hand, are produced less often — generally once or twice a year. Instead of continuing effort, they require a lot of work in a short time, and they are usually more expensive. Use your best graphics resources on these materials because they are designed to generate interest in a general audience.

Many projects have used audiovisual aids to stimulate interest in their programs and to assist adopters by showing important operations in action. Consider seriously whether your program is suitable for audiovisual presentation and whether such a presentation will be helpful (by showing activity that wouldn't be well communicated in print, for example). Preparing effective, interesting audiovisual materials is tricky and often expensive, so be cautious.

*A comparison*

The chart in Figure 2 compares different forms. For more information, consult professionals who have worked with the media that you are considering.

## A WORKING OUTLINE

*List items and topics; include basic features*

After you have considered the various aspects of content and form, refine your outline of the materials that you propose to develop. List all the items that you think you will need and all the topics that you want each item to address. Use the number of topics that you will address in each item to estimate length. Add other headings as you think of them, and note the intended audiences. Refer to the list of basic features that you and your staff have developed. Designate the item in which and the heading under which each basic feature should be discussed. This is your working outline. You'll undoubtedly revise it many times, adding and deleting as well as reorganizing. Nevertheless, it's a handy starting point and an easy way to focus your work. Keep it at hand.

FIGURE 2

*A Comparison of Available Forms*

| FORM | ADVANTAGES | DISADVANTAGES |
|---|---|---|
| Print | Convenient to use<br>Relatively permanent<br>Low per-unit cost<br>Easy and relatively quick to produce<br>Can be mailed<br>Variety of production methods available | Audience of one<br>Can't show movement or sound<br>Distribution may be expensive |
| Slide-tape | Can be shown to large groups<br>Can combine color and sound<br>Slides can be reused for other purposes<br>Equipment for viewing usually available<br>Can be revised easily | Can't show movement<br>Often used where a less expensive booklet would do as well |
| Film | Realistic<br>Most attractive to audience<br>Easiest to show mechanically<br>Synchronizes sound with action<br>Can be shown to large audiences | Most expensive medium<br>Requires high level of technical skill<br>Revision difficult<br>Long production period<br>Film stock can't be reused |
| Videotape | Less expensive than film to produce<br>Editing easier (because can be played back immediately)<br>Synchronizes sound with action<br>Tape can be reused | Requires high level of technical skill<br>Revision difficult<br>Playback equipment unfamiliar to many and not readily available at all sites<br>Not suitable for showing to large groups |
| Overhead transparencies and enlarged photos | Helpful in variety of situations<br>Flexible<br>Easily transported<br>Less expensive to produce<br>Can be shown to large groups | Require skilled presenter for most effective use<br>Require good graphics |

## DOING A GOOD JOB

*Important considerations*

The main reason for doing a good job is, of course, that the better your materials are, the better they will serve the specific purposes for which they have been designed. But materials also convey a general impression, and it's important to remember that anything you produce reflects directly on the overall quality of your project.

Materials that are well organized and clearly written imply that project staff are clear about what the program is and how it can help others. Attractively designed materials tell people that the project cares about its image. Easy-to-use materials let people know that the project regards their time as valuable. Appropriate materials tell people that project staff are experienced. Materials speak for a program and the way in which project staff view their work with others.

Experience has shown that people in education respond favorably to materials with the following characteristics:

- a simple, clean, and attractive appearance
- clearly presented and well organized information
- durability
- easily identified and cross-referenced parts
- minimal weight and bulk

*A note on style*

Writing style is perhaps the most important factor in the impression conveyed by your materials and can stimulate or discourage reader interest. Whether you and your staff or an outsider do the writing for your project, you should keep in mind the following points:

Be concise and to the point. Aim for clear sentences that communicate and are interesting to the reader. Organize for clarity, using tables of contents and logical headings to help the reader find information quickly.

Watch your language. Many words and phrases carry undesirable connotations. "Accountability," for example, has become an irritant to many teachers. (External reviewers can help alert you to dangers of this type.)

Choose words that are appropriate to the content. Although it is widely used in education, jargon is not an acceptable substitute for well-developed thought and clear expression. Terms that are meaningful in discussions of computer technology, systems analysis, and clinical psychology have little to do with students in classrooms. If several words have the same meaning, use the word that is most direct. Why say "component" when a simple word like "part" will do?

Be consistent. It's disturbing to read the words "full time teacher" on one page and "full-time teacher" three pages later. When many people are involved in the production of materials, the likelihood of inconsistency increases. Several different systems for the styling of printed materials are used in this country, and many good guides are available. Choose one, and follow it carefully.

Use of a style sheet, a practice common in commercial publishing, should be helpful to you. Decisions about the spelling, hyphenation, and capitalization of individual words and phrases, about punctuation, and about the handling of numbers, dates, abbreviations, and peculiar typographic features are recorded systematically — under individual letters of the alphabet for words, and under key words for other text and design elements. The style sheet allows copy editors to achieve consistency with little effort. Use of a style sheet along with a style guide will help you to give your materials a consistent, well-finished look that will inspire confidence in their content.

(One of the most respected books on writing style is *The Elements of Style* by William Strunk, Jr., and E. B. White. A careful reading of the first two chapters of this brief text — "Elementary Rules of Usage" and "Elementary Rules of Composition" — can be invaluable even to the most experienced writer. A more detailed reference is *A Manual of Style* published by the University of Chicago Press.)

# *Planning Personnel, Budget and Schedule*

This section is concerned with managing the development of your materials — selecting and using available personnel, budgeting available funds, and scheduling. These are separate but interrelated tasks; you can't make decisions in one area without considering the others.

For example: You'd like to hire a specific person to complete final editing of your typescript, but that person won't be available at the time your draft will be ready. Should you adjust your schedule? How will an acceleration of production affect the quality of your materials? How will a delay affect your overall dissemination plan? If you do spend money for an editor, will your present staff have to handle collating and mailing? Can they do this job and fulfill their other responsibilities?

How you manage development of your materials will, of course, depend on your overall situation and the nature of the materials that you plan to produce. The preceding section suggested that you draft a rough outline of the contents of your materials, noting each item and identifying the audience for whom you intend to prepare information. Keep this outline at hand as you start to assess your personnel needs, develop a budget, and plan a schedule.

## SELECTING AND USING AVAILABLE PERSONNEL

As you decide who will do what in development of your materials, keep in mind your content outline, the tasks that you expect will be required, and your budget. Specific requirements are different for every project, but the personnel that you use will fall into three general groups: those who plan and write the content, those who review draft versions, and those who perform the various tasks involved in reproduction and distribution. These people can be project staff members, others within your school, district, or agency, and workers from outside.

*Project staff*

Your own staff is your main resource; they know the project best, and you know their skills and experience. The following considerations can help you to assign your staff wisely and identify the areas in which you'll need to look beyond your staff for help:

What percentage of each person's time can be used for work on materials during the projected production period?

With what aspects of your program is each person most familiar?

In what phases do you expect each person to participate? What specific tasks could be assigned to each person?

*School, district, or agency personnel*

After project staff, the next best resource is other people in your school, district, or agency. These colleagues can often fill gaps in your effort by their "know-how," "know-where," or "know-who." For example:

An art teacher may also work as a free-lance graphic artist. Don't forget to check for hidden talent; a new history teacher may have graphic art experience. High school business classes are a possible source of typing services. The duplicating department may be able to print all or at least part of your

materials. The school or district business office may have some experience in setting prices for educational products.

The district purchasing agent may maintain lists of reliable mailing firms. A vocational teacher may have contacts in the local business community who can refer you to reliable vendors. The director of another project may be able to refer you to editors and designers whose work has proved satisfactory.

Be sure that any colleagues whose aid you enlist will be able to complete their given tasks according to your schedule, and be sure to acknowledge to the appropriate supervisors any assistance provided.

In addition to providing valuable help, involving colleagues in your materials development effort is a good way to build knowledge of and support for your project at the home site.

*Personnel from outside*

Personnel from outside can provide additional skills, experience, and labor, as well as a fresh point of view. At a minimum, you should seek outside help for review of your draft materials to make sure that they communicate what you intend.

Whatever your reason for enlisting outside help, budget constraints will be a primary consideration. Remember that services are available in many different forms. A consultant can be hired full-time or for just a few hours, for example. A printing firm can be engaged for complete production of a brochure, from design through reproduction and mailing, or for single tasks, such as paste-up or reproduction. Acquaintances may provide help free of charge.

When hiring someone from the outside, ask to see work samples, and watch for possible deadline conflicts arising from other contracts to which the consultant or vendor is committed. Respect professional judgment, but retain the right of approval at specified stages of development.

It is often appropriate to negotiate an agreement in writing that sets up a firm schedule, calls for step-by-step review of work in progress, and allows for termination of the assignment if the work proves unsatisfactory. Cost estimates from vendors are essential, though they may not prove to be exact. (For example, printers often estimate on the high side to protect themselves. On a job that has taken a long time to get to the printer, printing estimates may prove low because of inflation.) For some types of assignment, such as project analyst and writer, a local university's graduate departments — education, psychology, or journalism, for example — can be a good source of potential employees. Expert help is sometimes available from educational research and development agencies and private consulting firms, if your financial resources permit.

*Main assignments*

The following paragraphs describe some of the more common personnel assignments — those essential in any production effort and those often required. Depending on the size of the job and on the resources that are available, each of these assignments may be undertaken by a different individual or one person may handle several.

*Production manager*

It is essential that one person take full responsibility for supervising production of all materials. This production manager should have administrative and organizational skills and be thoroughly familiar with your program. If the effort is to be extensive, managing it should be this individual's main job. A comfortable working relationship between the production manager and the project director is important. (A single person has often performed both functions.)

*Project analyst*

The second critical assignment is that of analyzing the project's program and choosing the content of materials. The analyst must identify the key elements that make your program work with learners and the features that clearly distinguish the program from others. It is often a sensible idea to assign this position to an outsider who can observe the project as a whole and from a fresh perspective. (Project staff have been known to take important features for granted and fail to mention them, for example.) If your budget is tight, it's still wise to engage an outside analyst for a day or two at the beginning to help develop an outline and, later on, to review the first draft.

A good analyst will have an ability to see your program from the adopter's point of view, an understanding of the program's subject area and content, familiarity with similar programs developed elsewhere, an ability to win and maintain the full confidence of project staff, good interviewing techniques, and knowledge of pertinent state and federal regulations. Finding someone with all these qualifications is difficult. Decide which qualifications are the most important to you.

*Writer/editor*

Depending on your budget and the qualifications of your staff, you may want to hire an outsider to do all or some of your writing or at least to edit your materials. A single person can sometimes serve as both analyst and writer. It is crucial that your staff feel comfortable with the writer/editor's personality and understanding of the program.

This assignment will probably be filled best by someone who has written articles for a journal or trade magazine (rather than research documents), long narrative materials (rather than short public relations pieces), or materials intended for the general public (rather than for professional groups), or by someone who has taught at the level your project serves.

*Audiovisual expert*

A trained audiovisual expert can do much to ensure that your message is communicated concisely and interestingly; unless someone on your staff or in your district has professional skill in this field, you'll need outside assistance for the production of any audiovisual materials. Someone who has successfully produced materials for professional audiences or the general public should be your first choice.

*Designer/ graphic artist*

Design and graphic art is another area in which you'll need expert help unless someone on your staff has special aptitude or training. Possible assignments you may wish a designer to handle include the following: choice of typographic style; design of a project logo, a mailing container, or any templates required; recommendations on ink and paper stock and color; decisions on size and format; rough or finished layouts for specialized pages or brochures; negotiations with printers or assistance in working with printers;

tracking of materials through production. (See the section on producing printed materials for a better idea of what's involved.)

*External reviewers*

Long before you're ready for a full-fledged tryout, you'll need outsiders to review draft materials. These external reviewers should be similar to the people for whom your materials are designed. For example, invite teachers to review your teacher's manual and administrators to review project management materials. Choose people who did not participate in your development and validation process and who will comment freely and impartially.

*Printer/ manufacturer*

The ability and cooperation of the people who handle the printing and manufacturing are likely to be vital to the success of your materials. Unless all your printed and audiovisual materials are to be produced entirely with your own facilities, you'll be looking for outside suppliers of these services, perhaps through the district, college, or agency purchasing office. Be sure to check with administration officials regarding contractual and copyright policies.

*Distributor*

Distribution of materials is discussed in detail on pages 49–60, but the question of whether your staff, some other group in your school or in the district, or an external agency or firm will handle distribution is important as you plan staff time. During the early stages, you may prefer that project staff distribute prototype and field-test versions. Later, when you're busy with demonstration and training, distribution by an outsider may be more efficient. Also, plan for the possibility that demand for your materials will continue even after your project no longer receives dissemination funds.

## BUDGETING

Your projected budget will dictate the extent of your effort. If you haven't had a lot of experience figuring how much money is available and planning how it will be spent, ask your finance office for help, then reach for your calculator. Any materials budget must be designed with several considerations in mind. These include requirements set by outside funding sources, the accounting procedures required by your own district or agency, and whatever features complement your management style and allow you to keep an eye on expenses.

*Breakdown of costs*

You will probably want to break down your expenses specifically and estimate quarterly costs for the year. Then, at the end of each quarter, you can note over- or underspending and make adjustments in the following months.

Your costs will be divided into such general areas as: personnel services, including staff and special consultants and such other expenses as temporary employment agency fees and substitute teachers; travel, for field tests and consulting; communication — telephone, mail, and shipping; printing and reproduction — photocopies of early drafts as well as reproduction of final version; supplies and equipment, such as paper and typewriters; other services, such as public relations, conference registration fees, and equipment rental; and indirect costs charged by district, school, or agency, for office and storage space and general administration expenses.

Personnel costs, including salary and benefits, usually account for 60 to 70 percent of expenditures. To figure these costs, prepare an overall time schedule (more on page 25), assign personnel to tasks, and estimate the number of days that each person will spend on packaging assignments.

Costs in other areas will depend on decisions that you'll be making. Will you rent a memory typewriter? Will you produce audiovisual materials? Don't expect your first estimates to match available funds. Planning an accurate budget takes a bit of shifting, trial and error, and time. One suggestion is to make as realistic an estimate as possible, then double it, since those with experience say that it's far better to be overbudgeted than underbudgeted.

*An illustration*

The staff of Project Catch-Up, a reading and math program for elementary students that has operated as an NDN Developer/Demonstrator for several years, developed an information package consisting of four elements: a management manual, a videotape, a synchronized slide-tape production, and a brochure. Based on this experience, Project Director Fay Harbison offers the following advice on making up a budget.

"If you are planning for the first time to produce any printed brochure, catalog, slide-tape, or videotape and you hope to achieve professional quality, allow for a larger budget than you at first consider necessary. Although 'loving hands at home' items describing projects have been very inexpensive, they too often conceal the real costs because they include hours and hours of volunteer time. Now that your job is national dissemination, you won't have time to organize the troops back home. Now is the time to learn about the professional ad man, the printer, the designer. In the long run their products may tell your story better and save you time and dollars."

*Sample expenditures*

Below are Project Catch-Up's costs for the four elements of its information package in 1979. (The figures below are presented merely as one example. Exact costs in other locations at other times will, of course, vary.)

I. *Catalog.* An effective, fairly simple 35-page catalog may initially cost in the neighborhood of $7.83 per copy. These actual costs for the first press run of 100 copies of a sample catalog may be of assistance:

A. *Typing* transcription of dictation and three drafts (if you can't steal time from somebody else's secretary)...six days at $56 per day ..... $336.00

B. *Graphics*

1. Photographer (if you have to hire one) ..... $ 50.00 per half day
*or*
If you don't have to pay a photographer, processing, enlargements (black and white) ..... $ 20.00

2. Processing

a. Plates (10 pictures at $12 per picture) ..... $120.00

b. Multilith.....(by far the cheapest way unless you have access to an offset press) .....$ 1.00
per 100 copies

3. Cover (It is worth it to spend a little more for good paper stock.)

a. Paper stock.....$ 8.00
b. Printing .....$ 4.50
per 100 copies

4. Consultant help for layout and other (We needed it.)

a. Suggestions only.....$100.00
b. Type if needed .....$100.00

INITIAL Total.....$783.50
PRINTING Per copy .....$ 7.83

(Subsequent reprinting eliminates all major expense items.)

II. *Videotape.* Even if you have an unusually good district audiovisual service, a videotape worth showing to the public requires professional help. The following estimate of costs for one 12-minute black and white production may be helpful:

A. *Tapes*

1. Four rolls at $11.50 each .....$ 46.00
2. Equipment rental (if you can't get it free from school district) .....$125.00

B. *Consultants* six days at $100 per day .....$600.00
(two days in shooting, one in editing)

(two persons are suggested, two days shooting, one editing; three days of producer and three days of director)

C. *Camera operator* one day of shooting and one day of editing at $100 per day.....$200.00

The most surprising thing about video production is the amount of time it takes to write scripts, rehearse, shoot, and edit.

Total.....$971.00

III. *Synchronized Slide-Tape Production.* For one fairly simple 7-1/2 minute, synchronized 35mm slide-tape production, the following costs were projected:

A. *Film and developing* for 80 slides (240 shots).....$175.00
B. *Camera operator*, one day .....$ 90.00
C. *Consultant* to write script, organize slides, select and record musical background .....$675.00
D. *Cassette tapes* .....$ 13.00

None of these cost projections took into account the staff time of teachers or the project director or of the subject children, who were free. Further, project staff had produced most of the materials and scripts in advance. This means that in spite of many, many hours of planning on the part of regular staff, special productions need special skills, and these need to be planned and paid for within the dissemination budget.

Total.....$953.00

IV. *Brochure.* One double fold 8–1/2 x 13-inch brochure

A. *Card stock*.....$ 5.32
B. *Photograph plates*.....$ 90.00
C. *Photographer* (and enlarged glossies).....$ 70.00
D. *Layout artist*.....$ 30.00
E. *Printing* (multilith).....$ 9.00

INITIAL Total.....$204.32
PRINTING Per copy.....$ 1.44

## SCHEDULING

Planning a time schedule for preparation and production of your materials is crucial. The nature of your materials, the availability of personnel (staff or outside), and the size of your budget funds are again the main considerations. Whatever your specific situation, each item that you produce will pass through several stages, and each stage must be included in your schedule: planning, preparing content (including research and writing), outside review, revision, production, distribution, and follow-up.

*Factors that affect scheduling*

Many internal factors affect scheduling. These include the amount of work already completed or near completion; the commitment of project staff to other necessary tasks not related to materials development; absenteeism, illness, and other personnel problems; and previous experience of staff with similar work. If one person will do most of the work on several items, your time schedule must reflect this constraint. If several people will be working simultaneously, the time required will probably be less.

Another important factor is the availability of external assistance. Where and when can outsiders be assigned tasks that will speed up production? How will your schedule be affected by the current workload and future commitments of consultants, suppliers, and others?

The school-year calendar, with its cycles for curriculum selection and adoption, must be considered. How does your projected production timetable fit into the curriculum selection schedule of the districts you will be trying to reach?

*Approaches*

There are many approaches to scheduling, but realism is what's most important. Plans for the first year should be modest and allow for minor setbacks (such as when your first tryout shows that a complete rewrite is necessary,

your writer quits, or the printers go on a three-month strike). Tight schedules often spell disaster.

*Consider overall plan*

First, think of your overall diffusion plan. What would be the best date for delivery of completed materials to your doorstep? What would be the latest possible date? With these dates identified, back up and sketch out a proposed timetable for each step that you have foreseen.

*What's important, easiest, or small*

Sometimes it may be best to start with the materials associated with the most important aspect of your program. Another approach is to start by producing what is easiest for your staff in light of their other tasks. Still another approach is to start with a part that is small and not too costly, so that your first production experience is relatively manageable. Plans for the production of other materials can be revised based on this experience, if necessary.

# *Producing Printed Materials*

This section outlines the steps required to produce printed materials and offers hints on different approaches. It does not provide technical details but rather a set of suggestions to help you decide what you can do yourself and what you may need the help of a professional graphic artist, typesetter, or printer to accomplish.

Less expensive and more expensive procedures are noted along the way. The choice of procedures will depend on the effect that you want to produce and on your budget and final deadline.

## COMPREHENSIVE LAYOUT: THE DUMMY

*Function*

The dummy, also known as the comprehensive or "comp," is a hand-drawn representation of the final printed product — in other words, a design of the product under development. The function of the dummy is to provide an approximate image of the printed publication; to assure everyone concerned that all copy will fit into the design, that all elements are visually pleasing, and that the design is appropriate for the message; and finally to provide a basis for estimating printing costs.

Usually, the dummy is prepared by a graphic artist or designer. However, a project staff member can learn to perform this task, with considerable cost savings.

*Materials needed*

A variety of resources can be used to produce the dummy: pencil and pastel, felt tip pens and markers, transfer letters, shading sheets, pressure-sensitive graphic art tape, colored paper, and colored acetate sheets. The dummy is prepared on a layout pad or on the actual paper stock to be used and should neatly and accurately project what the final printed product will look like.

*Contents*

The dummy layout contains schematic representations of all elements involved in the design, including finished format and size, location of copy and illustrations, and representation of heads, margins, and white space.

Body copy is usually indicated by parallel lines in the space that will be occupied by the typewritten or typeset copy. Headlines, subheadlines, and picture captions are sketched in the sizes and weights (light or heavy type) in which they are to appear in the final product.

*Illustrations*[1]

The location of any illustrations (drawings, photographs, charts, or other graphics) is indicated by a few simple lines or strokes, since many dummies are made before the actual drawings or photographs are available. This layout can then be used as a guide by the artist or photographer, since it shows the size and location of finished illustrations.

*Margins and white space*

Finally, the dummy layout reflects the relative position and proportions of margins and white space. When correctly applied, white space prevents monotony, directs attention, contrasts or emphasizes elements, and stimulates optical rhythm. A good layout is never crowded.

[1] Illustrations are a separate topic and are not treated here. Much thought must be given as to how many and what kind — photos or drawings — are needed to properly convey your message, what the best source of illustrations is, and how your photos or drawings should be presented and cropped to highlight the text.

## PROOFREADING

*What it is*

Effective proofreading is an important task. It takes time, painstaking attention, and patience, but doing it well will help you to avoid embarrassing errors and costly mistakes. The consequences of a misspelled name or an inaccurate detail or number are easily imagined if the name is the author's, the detail the site of an annual advisory board meeting or the size of a population served by a specially funded program.

Every step of the production process that alters the form of the original typed copy requires proofreading.

*How to do it*

One of the more thorough ways to proofread copy at every stage in the process requires two people. One person reads aloud, noting all marks of punctuation, while the other follows the typewritten or typeset copy.

In the case of typewritten copy, corrections should be noted in the margins of a photocopy of the material being proofread. This procedure keeps the original clean; a clean original is easier to correct.

In certain instances, it may be preferable to note corrections directly on the original, using a nonreproducible, also known as nonphoto, blue pencil. One should nonetheless be wary: marks made with nonreproducible blue pencils have been known to show up on printing plates, so a light hand is advised.

With galleys, however, it is best to mark corrections directly on the proofs — again in the margin.

*Key checkpoints*

In the early stages of proofreading, pay special attention to style. Style should be clear and above all consistent. Typographical errors are relatively easy to spot. More care is required to catch misspelled words, poor grammar, and incorrect punctuation and capitalization, and even more to note inconsistencies in the handling of abbreviations, acronyms, and titles. The hardest and most important errors to spot are errors of fact. Divisions within words at the ends of lines of typewritten or typeset copy require much attention, too. You should choose a basic dictionary and stick to it. The University of Chicago *Manual of Style* prefers Webster's *Seventh Collegiate*.

If copy is typeset, then the galley proofs (long sheets of typeset copy on which corrections can be made, also called galleys) must be proofread. The corrected galleys must also be approved. The corrected galleys should be read as carefully as the first proofs; mistakes can occur while mistakes are being corrected. However, once this stage is reached, revision should be limited to correcting the typesetter's errors. To add new copy or delete extensively from existing copy can raise costs disproportionately. Mistakes made by the typesetter must be corrected at no cost to you, but other changes are charged to you as "author costs."

If a paste-up, or art mechanical, is involved, it, too, must be examined with care before it is sent to the printer. See that lines are straight, headings are accurately placed, margins are true, pictures and other graphics are properly cropped and captioned, narrative copy is correctly sequenced, and white space is sufficient.

The final checkpoint before the publication goes to press is known as the brown line or blue line — an exact replica of what will appear on the printed document, pulled in brown or blue ink. At this point, you are not proofing type but checking for misplaced and crooked pages, marks and smudges, damaged and irregularly inked characters, and incorrectly placed photographs. Take one final look at the front and back cover pages, inside and out, to check for proper alignment and correct content. Plan your production schedule so that adequate time remains for this step. Even the best printers can make mistakes. Particularly for small print jobs, the printer may not automatically show you the brownline, but you should insist on seeing it. This final proofing is crucial, even if it adds a day or two to your schedule.

## SETTING FINAL COPY

There are three options for readying final copy for the printer's camera. Final copy may be typewritten, it may be typeset, or a combination of these two methods may be used. In the latter instance, body copy is prepared for the printer's camera on a typewriter, while headings, subheadings, charts, and other graphics are typeset.

*Typewritten copy*

An electric typewriter provides adequate uniformity for final copy. A plastic ribbon produces high quality originals. The size of the typewriter type can be altered by reduction. Typewritten copy can be photomechanically reduced by as much as 20 percent and retain its legibility. Photomechanically reduced copy requires less space, or to put it another way, more copy can be contained in a given space.

Typewritten copy costs less to produce than typeset text. Because copy can be set in the project workspace where many of the other steps are performed, corrections are more readily made, and overall production time is reduced. For these reasons, you would be well advised to use typewritten copy for publications requiring frequent revision or updating. If the typist is good, this is also the cheapest method.[2]

Disadvantages include the relative bulk of documents prepared from typewritten copy (bulk means increased printing, packaging, and mailing costs), the limited selection of typewriter typefaces, and the impossibility of justifying (aligning) right-hand margins except on some special makes of typewriter.

*A combination*

Typewritten and typeset copy can be combined in a single publication. That is, text copy can be prepared with a typewriter, while copy to be highlighted (for example, title page, graphs and graphics, and headings) can be typeset. However, be sure that the typewriter type style resembles or blends well with the typesetter's typeface. Also remember that if the typewritten copy is to be reduced, the typeface selected must be of compatible size. Be sure to schedule some layout time for pasting in the typeset heads.

*Typewriter type elements*

Many electric typewriters in widespread use today accommodate a variety of interchangeable type elements. Italic, script, and oversized faces, as well

[2] The new photocomposition computer permits transfer of typewritten copy directly to typeset and camera-ready copy on 8-1/2 by 11-inch paper, eliminating the need for layout and paste-up.

as the standard pica and elite, expand the options within this mode of production. Interchangeable elements make it possible to present different parts of the text in different faces and to highlight headings and other special features at low cost.

*Typeface design and size*

A project staff member acting as designer or graphic artist may want to consult a printer or typographer for advice on both type size and typeface. Sometimes such decisions are a matter of aesthetic preference; you must be the final judge.

There are hundreds of widely available machine-set typefaces and thousands of hand- and photolettered variations. Typesetters, graphic artists, and printers have reference books, catalogs, or specimen sheets illustrating the many possibilities. While fashions in typeface come and go, some faces stand the test of time. Optima and Helvetica Medium are standards in educational publishing.

Type comes in numerous sizes, which are described in terms of points. Seventy-two points equal one inch. Type that is 14 points and smaller is known as text type; type larger than 14 points is known as display type. Numerous factors must be taken into account when choosing type size. For example, commercial publishers generally use the following rule relating reader age and appropriate type size: for children under seven, copy type should be 18 point; for children seven to 10, 12 or 14 point; for children 10 to 12, 11 point for good readers and 12 point for poor readers; for children over 12 and adults, 11 point.

## THE PASTE-UP

In preparing the paste-up, also referred to as the art mechanical, a layout person places in position and pastes to a piece of cardboard the various elements required by the design as represented on the dummy. If the copy itself is typewritten, paste-up is needed only for covers, special divider pages, and pages containing artwork or photographs. All typeset copy and artwork must be pasted up.

After the paste-up is completed, the printer photographs it to make a printing master, which serves as a camera-ready unit. For pages of text containing no artwork, the printer can make masters directly from the typewritten or typeset pages.

*General procedures*

The paste-up is often done by a graphic artist, but if the amount of work involved is small, the paste-up can very likely be accomplished by project personnel, at considerable savings.

Also, errors are more quickly spotted and corrected and the project has more control over the time factor if the paste-up is done internally.

To begin, gather together the completed illustrations, charts, and other graphics, and the corrected typewritten and/or typeset copy.

The amount of time needed to complete the paste-up is related to the size and complexity of the job. A simple brochure may take just a few hours, 20

pages containing both copy and illustrations may take two or three days, while a hundred-page book may require five days or more.

It is important to tell the printer to return all mechanicals to the project. All masters and artwork should then be wrapped, marked, and stored flat in a safe place where they can be easily located again. If reprinting is in order, they will be there when needed.

## SELECTING PAPER, INK, AND COLOR

A printer has charts showing the different inks and paper colors, weights, and sizes available. These charts allow you to evaluate the potential effect of a given combination, and they enable you to make cost comparisons.

*Selecting paper*

There are many weights and qualities of paper. Ask what stock the printer has on hand. Printers often give a good price for paper left over from a previous job.

If the material being published is a classroom curriculum guide, a workbook, an activities manual, or some other consumable resource, an inexpensive paper, referred to as 20-pound bond and equivalent to 50-pound offset book, is best. Two more costly options are higher grade book paper and text paper. Generally speaking, coated papers — which have surfaces ranging from matte to glossy — are most expensive; for this reason, they are usually reserved for posters, brochures, and covers.

Colored papers cost more than uncolored papers of the same fiber and weight, but the expense is at least partially offset by the attention-getting effect and the variety. Interweaving colored stock with white increases the cost still more, as does use of two or more colored papers.

The expense of a publication is also increased if graduated paper sizes are used — that is, if pages of different size are used to emphasize the individual sections of a book or booklet.

The weight of the paper you select will also have a bearing on your total costs, over and above the printing costs. The heavier the paper and the greater its opacity, the heavier the book and the higher your mailing costs. A good compromise between aesthetic preference and budget must be made.

The dimensions, or trim size, of the page in the finished product are normally determined when the dummy is being prepared. A size that is compatible with standard size paper limits costs. Nonstandard size paper reduces the number of pages available from single sheet, wastes paper, and increases the cost. The four basic standard sizes, in inches, are 8–1/2 x 11, 11 x 17, 17 x 22, and 23 x 35.

*Selecting ink and color*

Decisions regarding color should be made well in advance of printing. Color sample books, called swatchbooks, available from manufacturers of color-matching systems, are helpful in choosing appropriate colors. Two such color guides are the Coloron, available from art supply houses, and the Pantone Matching System, available from printers.

Black ink is always cheapest. Because it is the color most commonly used in printing, choosing it can often save the cost of an extra press wash-up or cleaning. Each color added to the same publication increases the cost because the item must pass through the press every time that an additional color is applied. The use of several colors produces a problem of register (alignment or relative positioning of different colors).

The ink or inks selected must be sufficiently dark to allow the text to be read and for photocopies made from it to reproduce well.

If you wish to use colored ink and colored paper, compare the two colors to determine whether there is adequate contrast for the print to be legible. It is generally wise to avoid unusual color combinations, especially when photographs are included in the design. Bright red is very hard to read if there is a lot of text. If the overall design and the type used to compose text and headings are simple, a single colored ink on colored stock is often enough to create the impact and polish that your message needs.

Printing in two colors increases the design possibilities, but it also increases the cost. Printing two colors on the same side of a sheet doubles the number of negatives and plates required, doubles the on-press time needed, and doubles the number of steps in the washing and drying process.

One of the most common combinations is black ink with a second color. This combination allows illustrations and text type to be printed in black, while the second color is reserved for headlining certain information or for emphasizing the general design of the publication. A wide range of effects can be achieved by varying the tonal value of the two colors through screening.

A wide variety of effects can be achieved with a single color if such special printing techniques as screening, surprinting, and reversed printing are used, but special printing techniques can increase costs.

## PRINTING

*Processes*

The choice of a particular printing process will influence your decisions about type, illustrations, and paper stock, and will also dictate the manner in which the illustrations are prepared. An estimate of the expense involved by a particular process is crucial in planning your budget.

Three printing processes are used on a commercial scale today: offset lithography, letterpress, and gravure. Each of these processes can transfer an image from one surface (the printing plate) to another surface (the paper) through the medium of ink. Each process uses photographic plates that produce a negative film image of the material to be reproduced in print. For a variety of reasons, letterpress and gravure are more expensive than offset lithography. Figure 3 outlines some advantages and disadvantages of these three printing processes.

Depending on the needs and budget of your project, office machine photocopying of camera-ready copy may be an acceptable alternative, especially if the quantity needed is not large. Some printers now photocopy camera-ready copy onto colored paper stock available in a variety of weights; these

printers can also reproduce camera-ready copy on the client's letterhead or other paper supply. Other printing techniques — for example, silkscreen and stencil — can be used in special cases.

The size of the job determines how long printing will take. A brochure will require a few days, a book at least several weeks. If you're a good client, you may be able to convince the printer to speed your job through. Printers will sometimes rush a job for an extra fee.

FIGURE 3

*Major Printing Processes*

| ADVANTAGES | DISADVANTAGES |
|---|---|
| *Offset Lithography* | |
| Relatively inexpensive | Requires more attention to maintain consistent image throughout run |
| Less time to make plates | Corrections require making new plate |
| Produces halftones[3] easily | |
| Prints on wide variety of surfaces | |
| *Letterpress* | |
| Consistent quality throughout run | Plates more expensive than offset |
| Accepts papers of any thickness | Special process required for printing halftones |
| Proofing is relatively inexpensive | |
| *Gravure* | |
| Produces richest blacks and widest tonal range of all printing processes | Plates more expensive than offset or letterpress |
| Prints on wide variety of surfaces | Corrections are more expensive |
| Consistent quality throughout run | |

***Selecting a printer***

Any graphic artist or designer whom you employ will know a number of printers. If you're on your own, the Yellow Pages is the best source of names. On your first visit to a printer, ask to see samples of jobs that the printer has done. Ask for names of past clients, too. Talk to past clients to determine the printer's willingness to meet deadlines and the general quality of his finished products; what you hear about the problems that others have encountered may help you in making your choice. After you've prepared your specifications, get estimates from at least two printers so that you can compare prices and time allowances when making your selection.

[3] Halftones are photomechanical reproductions of continuous tone originals (photographs and artwork). A printing press prints gray only if gray ink is used. The illusion of intermediate tones is produced by photographing the continuous tone original through a fine screen consisting of dots or lines.

*Working with the printer*

Unless the project has printing facilities of its own, it is advisable to seek bids (estimates of printing cost) from two or more printers.

The best way to request an estimate of printing cost is in writing, using a request form submitted directly to the printer. The information you will need is outlined below. The specifications, or "specs," as your instructions to the printer are called, will later form the basis of a written agreement between printer and client. Reputable printers will provide not only an estimate for a given job but also a range of cost options varying with the paper and ink used. Be sure that all printers from whom you seek estimates bid on exactly the same specifications.

It is also helpful to have the printer provide prices for a variety of print runs, or quantities printed. You can sometimes obtain thousands of additional pieces for a few dollars more. If no changes in your material are planned, an overrun of the first printing is usually cheaper than a rerun at some later date. Try, however, to limit the various quantities for which you seek prices to a reasonable number. Quotes are usually given in multiples of 500.

One final consideration involves the number of pages contained in the finished document. Printing in signatures, or multiples of eight pages (four on one side of the printed sheet, four on the other), limits costs. Sheets are folded as one unit to form a section of a book.

To work with the printer, you must:

1. Prepare printing specifications in writing, taking care to specify
   - ink color or colors
   - paper color, weight, and texture for as many different parts as your design includes (text, cover, divider pages)
   - trim size (linear dimensions of the finished document)
   - total number of impressions, including front and back covers
   - run size (number of copies to be printed)
   - whether the art attached is camera-ready or whether preliminary work (screening, reduction) is needed
   - special effects (for example, reduction, screening, reverse printing)
   - printing process (in cases where there is a choice)
   - folding required
   - binding method
   - delivery dates for proofs and finished product
   - whether negatives are to be returned to client
2. Obtain and review the brown lines or blue lines. Check every item included in your design to be sure that it is in the correct place before the actual presswork begins.
3. Indicate the corrections required.
4. Check corrections if they are extensive.

## FINISHING AND BINDING

As already noted, trim size is the size of the page when the entire production process is completed. If paper sizes other than the basic standards are used, the paper must be trimmed to the specified trim size. Trimming is required whenever signatures are used.

*Trimming and folding*

Trimming requires cutting machinery and is performed by the printer. Printers have charts showing the recommended trimmed page size and the number of pages available per sheet when standard size sheets are used.

Folding is usually done mechanically, by a high-speed machine capable of making one or more folds in one or two directions. The creative decisions on how the printed sheets will be folded to present the printed information — for brochures and folders, for example — are made at the layout stage of production. But there must be a limit to creativity, for what the machine can do is not unlimited! A variety of folding styles is shown in Figure 4 on page 39.

## FINISHING OPERATIONS

*Finishing operations*

Finishing and binding charges are lower if standard size paper is used.

There are many ways of finishing a publication. Some of them are performed by the printer during actual on-press operations. Others are accomplished by binders in off-press operations. Matters to consider with the printer or the binder include:

- collating
- die-cutting
- drilling
- embossing
- engraving
- laminating
- perforating
- punching
- scoring
- stamping
- tabbing
- varnishing

These processes are explained in Figure 5 on page 40.

*Binding styles*

It is not necessary to consider binding procedures in preparing many kinds of printed materials because the printed sheet can simply be folded to produce the product desired. If the weight of the paper and the number of pages permit, a neat fold or a couple of staples provide a satisfactory solution for a simple booklet or brochure.

For a publication that will not be bound but inserted into looseleaf binders, the printed sheets should be prepunched. Units may also be packaged in a sleeve wrap (which encircles but does not permanently bind), in a shrink wrap (in which clear plastic is heat-treated to seal in completely the item it covers), or in a simple rubber band. Such methods are far less costly than more formal solutions.

For a publication with many pages, other binding methods must be considered. A number of binding methods are explained in Figure 6 on page 41. Possibilities include:

- gluing
- saddle stitching
- side stitching
- plastic binding
- spiral binding
- perfect binding
- grommet
- stapling
- velo binding

Costs vary widely. Saddle stitching and perfect binding are less expensive yet quite satisfactory. Velo, plastic, and spiral binding are more costly and time consuming, but they nevertheless may be the most appropriate method for some publications.

FIGURE 4

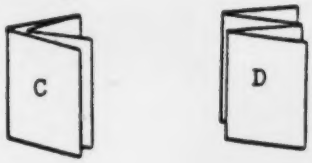
*Folding Styles*

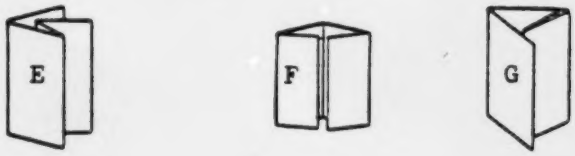
Before designing a product, check with the printer and/or the binder to learn which sheet can best be accommodated by the press and which folds can be produced most economically by the folding machinery.

*FOUR PAGE.* The simplest folding possible: one fold, producing four pages. The sheet can be folded on the short side (A) or the long side (B).

*SIX PAGE.* Two parallel folds — regular (A) or accordion (B) — producing six pages.

*EIGHT PAGE.* Commonly called the French fold, when the sheet is printed on one side only, folded once in one direction, rotated 90 degrees, and folded again at right angles to the first fold (A); a variation on this fold is (B) the short fold. An eight-page folder can be produced by making two parallel folds (C) or three parallel accordion folds (D), also called the Japanese fold. These are suitable if you wish to print on both sides of the sheet and to have a product that is easy to open. Other options are (E), (F) the double gatefold, and (G) the modified gatefold.




*TEN PAGE.* Four parallel accordion folds (A) or four regular parallel folds (B).

*TWELVE PAGE.* If the first fold is followed by two right-angle folds — either regular (A) or parallel (B) — a 12-page folder is produced.

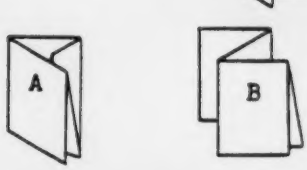


FIGURE 5

*Finishing Operations*

| | |
|---|---|
| collating | Signatures, or printed sheets, are arranged in proper sequence so that pages will be in the correct order for sewing and binding. |
| die-cutting | The printed sheet is cut with steel dies (resembling cookie cutters) to remove a portion of the sheet or to enable a portion of the sheet to be folded away from the remainder. |
| drilling | Holes are drilled into sheets so that they can be bound in loose-leaf binders or spiral bindings. |
| embossing | A pair of dies and a heavy duty press are used to produce a raised image (pattern or letters) on an otherwise flat surface. In debossing, the reverse process, the image is impressed into the paper. |
| engraving | A printing process in which the image (pattern or letters) is cut or etched into the surface of a metal plate for special printing. |
| laminating | A thin plastic film is applied to a printed sheet for protection and/or appearance. Laminating plastic is polyester or acetate, applied in liquid form or as sheets. |
| perforating | A row of small holes is punched in a printed sheet so that part of the sheet may easily be torn away (like postage stamps). Requires a die or perforating machine. |
| punching | Holes are punched into sheets so that they can be bound in loose-leaf binders or spiral bindings. Slot punching produces rectangular holes. |
| scoring | A crease is pressed into heavy paper stock to facilitate an even and accurate fold. Usually done on-press with round metal blades or wheels. |
| stamping | An image (pattern or letters) is impressed onto paper with heat, pressure, and metal foil to create a shiny raised image. Blind stamping omits ink and metal foil. |
| tabbing | Tabs (resembling those on file folders) are cut into or affixed to the edge of a sheet of paper. Tabbing may be staggered from one sheet to the next like steps. |
| varnishing | Protective varnish is added to the printed sheet on-press with ink rollers or off-press with spray guns or blade coaters. Spot varnishing covers selected portions of the printed sheet with press varnish. |

FIGURE 6

*Binding Methods*

| TYPE | DESCRIPTION | ADVANTAGES/DISADVANTAGES |
|---|---|---|
| glue | Glue or padding cement and a piece of cheese-cloth or gauze to add durability. | An inexpensive way to bind thin books or booklets at top or side edge. Sheets so bound are easy to remove, so this method is not recommended for publications that see repeated use. |
| saddle stitching | Wires inserted through the backbone into the center spread. A self-cover or a separate cover heavier than text sheets can be used. | The most common method of pamphlet or booklet binding, it is simple and inexpensive. It allows pages to open fully and lie flat for easy reading, but it is useful only for thin publications — booklets, catalogs, bulletins, and the like. |
| side stitching | Wires inserted from front page to back page 1/4" from the edge. Covers of heavy stock are affixed with glue and trimmed. | Used for thicker publications — books, magazines, manuals, and the like. Wires prevent the pages from opening flat. Wide inside margins are necessary to compensate for the extra space required by the wires. |
| plastic binding | Pages and cover are trimmed, slotted or round holes drilled or punched, and plastic coils inserted into the holes. | Ideal for textbooks, manuals, and the like. Pages lie flat when open. Plastic coils come in attractive colors. Drilling or punching the requisite holes is an added expense. Books so bound do not stack or pack well. |
| spiral binding | Pages and cover are trimmed, holes are drilled or punched, and metal coils with single, double, or multiple rings are inserted into the holes. | Ideal for textbooks, manuals and the like. Pages open easily, lie flat. Stronger than plastic binding; books bound by this method hold up well under constant use. Drilling or punching the requisite holes is an added expense. Spiral coil is inserted by hand or machine; in either case cost and time required increases. |

| | | |
|---|---|---|
| perfect binding | Pages are held together and affixed to the cover with adhesive strengthened by gauze glued over the spine. The cover — hard or soft — is pasted to the spine after the pages are trimmed. | Widely used for paperback books, manuals, and the like. Relatively inexpensive, durable, and attractive. Requires a certain thickness for successful use; cannot be used with thin booklets. |
| grommet | A hole is punched or drilled at one end and a metal grommet or eyelet inserted. | Commonly used to bind sample books. Pages can be rotated for side-by-side comparisons. |
| staples | Preformed strips of thin wire staples are inserted by a machine operated by foot pedal. | Simple and fast, inexpensive and unattractive. Restricts full opening. Pages can be torn out. |
| velo binding | Plastic strips with molded fingers are inserted into prepunched holes; requires 1/4" margin. | Especially suited to documents that are to be kept intact. Very strong. Pages cannot be removed. More costly than spiral binding. Sheets will not lie flat when document is opened. |

# *Notes on Producing Audiovisual Materials*

The purpose of this section is to help you decide whether audiovisual materials have a place in your dissemination package and to suggest ways of making an audiovisual presentation as effective as possible. As has been noted, there are several different kinds of audiovisual materials — overhead transparencies, slides and slide-tapes, filmstrips, films, audiotapes, and videotapes.

## DECIDING TO USE THEM

*The advantages*

In general, the advantages of audiovisual materials are that they enable someone far removed from an experience by time or place to share the experience in sight and sound; that they can capture and hold the attention of an audience; and that, when used by a speaker in conjunction with a live presentation, they can clarify information or reinforce arguments.

*The disadvantages*

Although they sometimes have more impact than printed materials do, audiovisual materials also cost more and require specialized skills and equipment to produce and present.

*Benefits versus expense*

If your resources make the use of audiovisual materials a possibility, consider the following questions to determine whether the benefits will be worth the expense:

Will audiovisual presentation make your program easier to understand (for example, by showing activity that wouldn't be well communicated by print)?

Will audiovisual presentation show your program at its best in ways that other media might not?

Will audiovisual presentation make it possible for intermediaries at distant locations to present your program to new audiences, thereby reducing your travel and staff costs?

*Choosing the kind*

The next question is the kind of audiovisual materials that best suits your needs. Consider the following:

Which medium will most effectively convey your message? For example, a film or videotape may be necessary to show the special movements that make a physical education program unique, whereas an audiotape may be all that's required to present a set of foreign language teaching methods.

Which medium can you afford? Audiotapes, overhead transparencies, and slides and slide-tapes are much cheaper to produce than are videotapes and films. If you're new to dissemination, you may want to choose a cheaper format in case you need to make changes.

Do you plan to have project staff present when the materials are used? Will the equipment needed to show your presentation be available? Overhead transparencies, slides, and sometimes filmstrips require presentation by a member of the project staff for effectiveness. Slide-tapes, filmstrips, films, and videotapes can stand on their own. Some of these audiovisual media are more widely used than others, and the availability of the necessary equip-

ment in areas where you expect your materials to be used must be considered. The best videotape in the world is wasted if your intended audience can't view it.

## BASIC PLANNING

*Personnel*

While the production of films and videotapes invariably requires professional help, you will usually need at least some outside assistance in producing such relatively simple materials as overhead transparencies and slides.

For example, you may need the services of a graphic arts lab when preparing overhead transparencies and of a photo lab for developing and copying slides that you shoot yourself. You will have to deal with a typesetter if you decide to use typeset titles and with a graphic artist if your presentation includes charts, graphs, or diagrams. In any case, producing effective audiovisual materials is not easy and can be very time consuming. Unless a staff member has professional audiovisual experience, it is wise to obtain assistance from a consultant. Specific technical and artistic skills are required. Look for someone who has both, in addition to a keen sense of cost factors.

Nevertheless, the consultant cannot do the whole job, even if you contract out for all of the actual production work. You know your program, you know whom it benefits, and you know who will be interested to hear about its benefits. As a result, you have a much better idea than any outsider of what your audiovisual materials must show and say to each kind of audience you wish to reach. You have to take the first steps in planning your audiovisual product.

A set of questions to use as you plan:

- Who is your audience? Students? Teachers? Administrators? Parents? Others? Some combination or all of these?
- How much does this audience already know about your program?
- What does this audience need to know?
- Can the needed information be communicated in a single product or will several be required?
- In what context do you plan to use your audiovisual materials? As part of a day-long training session? As part of a one-hour awareness session?

*Length of presentation*

You do not want to present more information than your audience can absorb. As a general rule, a short presentation is almost always more effective than a long one. Limit presentations to 10 or 15 minutes. If more time is required for adequate treatment, separate the presentation into two or more segments.

*The best approach*

When you have determined the needs of your audience, consider the approach that you want to use. For an audiovisual product to be effective, it must have an objective, which will determine the selection of all visual and verbal content. In defining the objective of your product, consider the setting in which you plan to use it. Audiovisual products have been used in two general situations: for awareness or advocacy and for training or instruction. Each requires a basically different approach. While advocacy does not

rule out an appeal to reason, affect plays the major role; if your goal is to persuade, you must take the beliefs, prejudices, and expectations of your audience into account. Instruction, however, places the emphasis on the information to be conveyed.

Keep in mind that the visual aspect of an audiovisual presentation is at least as important as the audio aspect and is the main justification for the added expense.

*Distribution*

The distribution of your materials raises another set of questions:

- How will you make your materials available to others? On loan? For rent? For sale?
- What prices will you have to charge to cover the cost of handling, shipping, clerical time, and possible loss or damage?
- Will your audience want to use the materials at these prices?
- Can your budget cover the costs of inventory maintenance and repair?

*Responsibilities and obligations*

The production of audiovisual materials also involves some responsibilities and obligations. First, remember that any existing printed material that you rephotograph may be copyrighted. You may not use copyrighted material without written permission from the holder of the copyright, who may further require you to acknowledge receipt of permission in the product itself. Second, you must obtain a signed talent release from any individual whose image or voice is to be incorporated into your product. These signed releases must be in your hands before the actual use of such talent. Third, if you plan to show identifiable private or commercial facilities, you should obtain written approval to do so. Last, recorded music is copyrighted; if you plan to use existing recorded music, you must obtain written permission from the holder of the copyright. If you plan to use original music, you must obtain written permission from the composer or an authorized representative, and credit must be given in the material itself.[4] If you contract out for the production of your materials, the contract should stipulate who must obtain the permissions and releases. Keep all releases and permission letters on file permanently.

*In conclusion*

Careful consideration of the questions raised in this section — and honest answers — will help you to avoid spending project funds on pointless audiovisual materials. Producing successful audiovisual materials requires careful planning as well as substantial outlays of time and money. The impact of successful productions in these media is considerable, but, by the same token, the failures are conspicuous.

[4] Marguerite A. Follett, *Manual for the Development of WEEA Educational Materials*. Washington, D.C.: Office of Education, U.S. Department of Health, Education, and Welfare, 1978, pp. 21-22.

# *Distribution*

Once your materials are completed, the next step is distribution — getting them to the user. Distribution requires knowing who and where the user is, choosing the best way to get the materials there, and then managing the whole effort.

There are many ways to distribute materials. You may turn your set of materials (or parts of it) over to a publisher for commercial sale, you may hire a distributor who will send your materials out and then handle any resulting orders, or you may find a mailing house that will store either your entire inventory or just some items and send materials to users at your request. You may decide to handle all of the distribution job yourself, just parts of it, or none. The main considerations in your choice should be convenience, expense, and — most important — effectiveness in reaching users. There are three main groups of users, and materials for each group have different distribution requirements.

*Distributing materials to potential adopters*

Awareness materials for potential adopters, whom you'll want to inform about your project, usually will be distributed free, and you'll want to reach as many potential adopters as possible. Your main concerns will be identifying them and getting your materials before their eyes. Distribution of awareness materials to potential adopters can be achieved directly — by mail or to site visitors and participants in project-sponsored activities — or indirectly — through such intermediaries as NDN Facilitators, federal and state coordinators, and Education Department officers and as handouts at meetings and workshops that project staff do not attend.

*To adopters*

After people have decided to adopt your program, you'll need to deliver the materials required for carrying out an adoption. Distribution of program materials to adopters is done directly, mainly through the mail and sometimes in person by trainers or others who are scheduled to visit adopting sites. The users in this case will of course have been specifically identified, and your main jobs will be setting prices, creating and maintaining inventory, and billing, handling, and shipping.

*To nonadopters*

Most projects limit their distribution to the two preceding groups, but some do engage in general marketing — actively trying to sell project materials to a wider audience, not just to those who adopt the program. If you have decided to make some or all of your materials available for sale to the general public, you'll need a more complex distribution mechanism, and you may want to turn the job over to a professional.

This section briefly outlines the main tasks involved in distributing materials to adopters and potential adopters and also includes notes on using outside help, marketing techniques, and copyright regulations.

## SETTING THE PRICE

*Your goal*

As a nonprofit project seeking to disseminate information, you should try to set the price of your materials high enough to cover costs and low enough to encourage widespread use.

*Determining cost*

The first step in setting an appropriate price for your materials is to determine exactly what you have to pay for them — their cost. For this purpose, all costs can be classified as either variable or fixed.

Variable costs are those that you incur with each unit of an item that you produce for distribution. Paper, printing, collating, binding, storing, shipping, and billing expenses are examples. In general, variable costs per unit decrease as the number of units produced increases.

Fixed costs are those that you incur by being in operation. They include rent, administrative salaries, and office expenses. Fixed costs change little in response to the number of units produced. For many projects, the fixed costs of materials development, such as writing, editing, and artwork, are covered by federal funds and so should not be considered when setting the price of the materials for users.

When estimating fixed and variable costs, remember the following:

Include anticipated distribution expenses — salaries for clerical work, and wrapping, mailing, billing, postage, and freight costs.

Set aside some free (or courtesy) copies to promote goodwill and support among such groups as school board members and influential state and federal agency personnel. (See Figure 7.)

Ask your district or agency business office to help you calculate fixed costs.

Consider the time that will be required for any special handling (for example, if separate items produced by your project will need to be removed from the shelf by hand for each order, rather than having all orders uniform and assembled ahead of time).

Allow for inflation. (Printing costs alone have been rising seven to ten percent per year.)

Variable costs per unit are relatively easy to figure because paper vendors, binders, and others quote their prices according to the number of units ordered. To figure the fixed cost per unit, divide the total fixed cost (or the share of total fixed cost that product sales must provide) by the number of units to be produced. The sum of variable and fixed costs per unit — total cost per unit — is what your price must be if you are to break even.

FIGURE 7

*Sample Distribution Worksheet for Free or Below-Cost Copies*

Item: classroom manual

| RECIPIENTS | NUMBER OF COPIES[1] | |
|---|---|---|
| | *Free* | *Below Cost* |
| Superintendent and central staff | 5 | |
| District library | 2 | |
| Project staff | 10 | |
| School board | 12 | |
| Project's advisory board | 15 | |
| Samples to adopters, conference copies, etc. | 50 | 50 |
| Principals in demonstration schools | 20 | |
| Federal project monitor | 2 | |
| State Title I/IV coordinator | 4 | |
| Area intermediate agencies | 2 | 20 |
| NDN Facilitators | 85 | 200 |
| Other linking agents | 50 | |
| Press copies | 25 | |
| Visiting dignitaries | 20 | |
| Field testing | 10 | 20 |
| Total | 262 | 340 |

*Is it low enough?*

Experienced project staff often stress the importance of keeping prices low. Unless your materials can be obtained easily, your diffusion plan will not succeed. To estimate whether your price is low enough, conduct your own informal marketing survey. Ask the opinions of potential users, and examine other materials similar to yours. Talk to the staffs of other projects. If it seems that your price may in fact be too high, look for ways to cut costs so that you can charge less.

[1] Your federal contract may have specific distribution requirements. However, you can be selective; all items may not be needed by all recipients.

*Additional considerations*

Remember that if you receive funds from federal sources, any project revenue is subject to federal regulations, concerning such matters as grant-related income and royalty sharing, for example. Be sure to check with your district or agency business officer, your federal project monitor, or your contract officer before you develop and sell any products (or training), to ensure proper use of project funds.

## CREATING AND MAINTAINING INVENTORY

*Estimating what you'll need*

The quantity that you decide on for your first print run will probably be a guess, but guess as accurately as you can. Until you have actually worked with adopters and the real demand for your materials begins, all estimates will prove difficult. Talk to others who produce materials for the same audience as yours and who have distributed materials for several years; they may be able to offer some guidance. At first, you may want to print in small quantities because you may be revising your materials after users have had a chance to work with them. A worksheet like that shown in Figure 8 can help you in making your estimate.

*Keeping records*

Once you have established an inventory, keep careful records on copies sold and copies distributed free. Good records will be an invaluable aid in future planning.

*Consumables*

If consumables — items such as students' worksheets and tests that can be used only once — cannot be duplicated at adopting sites, they must be produced in sufficient quantity to cover a substantial period of time — one year, for example. Wherever possible, offer spirit masters (for short runs) or mimeograph stencils (for longer runs) so that adopters can do their own duplicating of consumable items.

*Heavily used items*

Be sure that your planned inventory is adequate to cover replacement of individual items likely to be heavily used (or easily misplaced) as well as items that you're willing to sell to nonadopters for reference or adaptation.

*Control*

No matter how securely you store your product inventory, some shrinkage (unattributed loss) will occur. For example, some samples pulled to show to visitors will not find their way back onto the shelves. Some items will disappear in transit and have to be replaced. Some will be lost or destroyed at user sites or during training sessions, and back-up quantities will be needed.

You can minimize shrinkage by assigning all responsibility for inventory control to one person and by storing materials near your offices under lock and key. (A convention exhibit is the place where materials disappear most quickly. Don't leave materials unguarded, and clearly identify items as for display. Be prepared to suffer some loss no matter what precautions you take. Display only what you can afford to lose.)

FIGURE 8

*First-Year Production Estimate Worksheet*

Item: classroom manual

| DISTRIBUTION METHOD | QUANTITY 1st YEAR |
|---|---|
| Free or below cost | |
| Projected Sales (full price) | |
| School districts | |
| Universities/libraries | |
| State agencies/intermediate agencies | |
| General public | |
| Miscellaneous | |
| Total Units | |

*Signals for reprinting*

To signal the need for reprinting, insert a colored divider or flag at a place in the inventory of each item where reordering is necessary. Don't wait until all your handbooks are gone to arrange for reprinting. By calculating the average monthly rate of sales and other use, you can be ready with fresh inventory just about the time when the last piece from your current supply is being packed for shipment.

*Storage*

Be sure to store materials in a clean, dry, protected place, well away from water or heat pipes and sunlight. Consider the possibility that adopters will want to reorder copies of selected items. Plan storage so that these items can be easily picked off the shelf and shipped.

## ORDER PROCESSING, BILLING, AND HANDLING

*Should you do it yourself?*

If you're not set up for it, this operation can take up a lot of staff time that might be better spent in other ways. Even if you hire a student to come in and put the materials in boxes, management and supervision are required. Consult your district or agency business office for suggestions if you do plan to do this job yourself.

*Selling terms and other considerations*

Whoever does it — your staff or someone from the outside — you will have to answer certain questions and decide on your selling terms in advance. Consider the following: Who pays for insurance, if any? Who pays for postage or delivery charges? Is there to be a special charge for handling small, special, or rush orders? What invoice forms are available or need to be printed? Who will handle audit and accounting? What credit provisions are to be made for replacement of missing or imperfect items, for returned merchandise, or for nonreceipt of shipment?

## SHIPPING

When you're ready to ship your materials, a number of means are available. Those most often used include the U.S. Postal Service, United Parcel Service, and Greyhound Package Express.

*The U.S. Postal Service*

The United States Postal Service publishes a handy booklet, *Mailers' Guide*, containing information on differences in cost and delivery for the various classes of mail and on the allowable size and weight of packages.

You'll find many different ways to save on postage costs. Check bulk mailing regulations before sending out large mailings. In addition to reading the guide and other available brochures, contact your local central post office and spend some time with a service representative; discuss all postal alternatives before you finally decide on your means of shipping.

*U.P.S.*

United Parcel Service delivers packages to any address in the 48 continental states. Unlike the Postal Service (except for certain priority classes of mail), U.P.S. sets general minimum standards for parcel delivery. For example, within 150 miles, delivery is made by the next business day; 1,500 miles takes four days. Rate charts for Blue Label delivery (air service to certain states), surface out-of-state delivery, and local zone delivery are available upon request. Note that packages may not exceed 50 pounds. All packages are automatically insured for a specific amount; additional insurance is available. Pick-up service at your door is available in many areas. Should your package be delayed or lost, U.P.S can track it quite efficiently.

*Greyhound*

Greyhound also sets size and weight limits on the packages that it will handle and delivers anywhere that passengers are transported, including Canada. In most major cities, shipments can be picked up at your door and delivered directly to the receiver. A readily available bus station list indicates the cities served; other charts indicate prices.

*Other*

In addition to the preceding services, most airlines handle shipments and have special services for high priority parcels. You may also wish to check air freight services. If your area is served by a railroad system, check railroad shipment services. And don't forget to look into other smaller agencies in your area that may handle in-state or regional deliveries.

## HELP FROM OUTSIDE

Outside help for distribution is available in many forms, some of which are described below. A few specific sources are suggested, but the best way to find someone who can provide the services you need is to check with others who have successfully obtained those same services themselves — projects that have used a distributor, professional associations, and your state education agency. Help may also come from organizations that sell teacher training and curriculum materials.

*Commercial publishers and distributors*

Commercial publication usually works in the following way: A publisher invests in reworking your materials to make them conform to the publisher's own standards of what is commercially appealing, then prints, promotes,

and distributes the materials for sale. If you are considering commercial publication, get answers to the following questions before you decide:

Who will own the materials? Will the publisher own them, or will he just produce the materials and have distribution rights?

What changes will be made? Will project staff have final say over the outcome?

Who will make the initial investment? Usually it's the publisher who takes this risk.

Can you continue to distribute your materials yourself while they are being published? Publication usually takes at least several months and sometimes more than a year.

Who will promote sale of the published work? Does the publisher already have an audience similar to the audience you are seeking, or access to one?

Some projects that have turned their materials over to commercial publishers have found the arrangement to be satisfactory. Others have found that the advantages of commercial publication aren't worth the loss of control that is usually entailed. Also, most educational diffusion programs have too limited an audience to warrant the expense of commercial publication, and often the money required to give the materials commercial appeal is not even well spent. Potential adopters seem mainly to be looking for materials that are legible, attractive, and usable, not slick. Remember, too, that commercial publication usually increases the price that users will have to pay. Commercial publishers can be found through such trade organizations as:

Association of American Publishers
1 Park Avenue
New York, NY 10016

Educational Media Producers Council
3150 Spring Street
Fairfax, VA 22029

All publishers' names and addresses are included in *The Literary Market Place,* available at most public libraries and book stores.

*Nonprofit organizations*

Nonprofit distributors are another option, but finding them isn't easy. Most national professional organizations market only their own products. Among the nonprofit marketing operations that do exist for audiovisual materials are the following:

Agency for Instructional Television (film, videotape)
Box A
Indianapolis, IN 47401

Great Plains National ITV Library (film, videotape)
Box 80669
Lincoln, NB 68501

Modern Talking Picture Service (film)
2323 New Hyde Park Road
New Hyde Park, NY 11040

Anti-Defamation League (print, film; multiethnic orientation)
315 Lexington Avenue
New York, NY 10016

National Audiovisual Center (films, filmstrips, etc.)
National Archives and Records Services
Washington, DC 20409

Each of these organizations exhibits at national educational meetings, so you can consult with their representatives there, or you can write to them directly. Be sure to check local organizations in your area.

*Other suggestions*

For order processing, billing, and handling, your district or agency may already have the necessary personnel and procedures, and they may be willing to do the job for you, with a small service charge added to each order.

Another option is to contract with an outside agent. Another nonprofit organization, for example, may be willing to assume the job and bill you monthly for work performed. Or you may be able to find a commercial order processing and shipping firm that would be willing to bid for this new business. If you decide to do the job yourself, consult your district or agency business office for suggestions.

Many printed materials are made available through the Educational Resource Information Center (ERIC), a nationwide network sponsored by the National Institute of Education and designed to collect educational documents for teachers, administrators, researchers, students, and other interested persons. ERIC publishes a monthly journal announcing all documents that have been acquired. It is received by more than 5,000 organizations. Documents acquired by ERIC are available in microfiche or reproduced paper copy and are distributed to ERIC subscribers and made available by mail order. For information, write ERIC Processing and Reference Facility, Acquisitions Department, 4322 Rugby Avenue, Bethesda, MD 20014.

If your project focuses on the needs of the handicapped, it's a good idea to investigate the distribution facilities of the National Center on Educational Media and Materials for the Handicapped (200 W. 12th Avenue, Columbus, OH 43210) or the Council for Exceptional Children (1920 Association Drive, Reston, VA 22091).

Another possibility is LINC Services, Inc., the Market Linkage Project for Special Education (829 Eastwind Drive, Westerville, OH 43081). LINC provides comprehensive services to arrange for commercial distribution of materials developed by the Office of Special Education judged to be commercially distributable, including: marketing services to provide liaison with commercial publishers, producers, and distributors and to perform market analysis; legal services to conduct license and copyright negotiations; and editorial services, including screening and appraisal.

## MARKETING TECHNIQUES

*Useful for diffusion*

In the past few years, a substantial body of information on marketing has been accumulated. Marketing techniques have been defined as ways of analyzing, planning, implementing, and controlling "programs designed to bring about voluntary exchanges of values with target markets for the purpose of achieving organizational objectives" (Philip Kotler, *Marketing for Nonprofit Organizations).* Under this definition, marketing is really the basis of any dissemination effort, so a review of the available literature on marketing may prove helpful not only in developing materials but in every aspect of dissemination.

The main elements of marketing, and in many ways of dissemination, are: planning and survey; product and audience selection; pricing; and promotion through advertising, publicity, and direct contact.

*Some references*

In addition to Kotler's book, publications by Lazar and Kelley, Turnbull et al., and Zaltman, et al. (see Recommended Reading) may also be useful.

## COPYRIGHT REGULATIONS

*Your rights and obligations*

All states and many school districts, colleges, and universities have their own regulations and procedures for school personnel who wish to copyright materials that have been developed with federal funds. For example, some school districts permit copyright in the name of the local board of education, while others do not permit district staff to copyright anything produced in the district for sale to others in education. You must meet your own local requirements, and you must also comply with federal regulations.

In general, all federally supported materials are intended to remain in the public domain, but the Department of Education recognizes that copyrights are often appropriate, and they may be obtained in many instances. Without a copyright, your work can be duplicated without your permission, and often widespread duplication will serve your purposes best. For example, the NDN catalog *Educational Programs That Work* was not copyrighted specifically so that the information it contains would be disseminated to the greatest extent. Copyrights can be beneficial; they can, for example, provide incentives to private publishers to participate in the distribution of federally funded educational products where means for adequate noncommercial distribution do not exist.

New regulations governing the copyrighting of federally funded products are included in the Education Diffusion General Administrative Regulations (EDGAR) published in the *Federal Register* of April 3, 1980 (Part II). For an interpretation of how these regulations should be applied to your specific situation, write or call:

William A. Wooten, Copyright Administrator
Administrative Compliance
Department of Education
Room 3851, Donohoe Building
400 Maryland Avenue, SW
Washington, D.C. 20202 (202) 472-2655

*The rights of others*

When you are developing your materials, you must also be sure that you do not infringe on copyrights held by others. No copyrighted written or audio-visual material may be used without written permission from the copyright owner. This means: Don't use recorded music to dress up your productions unless the music is original or in the public domain. Don't duplicate material from copyrighted magazines, books, or newspapers, except for very short excerpts (nothing over 200 words), and then give proper credit. Don't quote poetry or use photographs or artwork without written permission. In other words, be extremely careful if you want to use any material that your staff did not originate.

Also, if you plan to use photographs that your staff have taken, be sure to obtain written permission for use of the photo from any person shown, or from the legal guardian of any minor. Maintain a permanent file of these permission forms to avoid potential legal disputes.

# *Appendix*

*The material contained in this appendix is from Producing Dissemination Materials (San Francisco: ED Materials/Support Center, Far West Laboratory for Educational Research and Development, 1980), a handbook produced for the Office of Career Education, Department of Education, under contract to Technical Assistance Base, Center for Resource Management, Inc.*

The complete inventory of materials that can make up a dissemination package is outlined in this section. However, it must be kept in mind that not all are needed immediately, and some, depending on the nature and philosophy of the program, may not be needed at all.

The various items are grouped and presented under four categories, awareness and selection, instruction, training, and management, to approximate the stages in the diffusion/adoption process that require materials. Awareness materials, to inform others of the existence and nature of your program, are of primary importance. If your program involves curriculum, instructional materials obviously must be available immediately in order for an adopter to plan for implementation. Training materials should be written only after staff have had some experience with the process.

The materials within each category are all described in a consistent outline format, under these headings: item, audience, purpose, content, format, life expectancy, distribution, and quantity. Although this consistency implies some repetition, it also allows each item to be considered by itself, without relation to the others.

## AWARENESS AND SELECTION

Awareness is the comprehensive term for a broad range of activities and support materials whose purpose is to let interested parties know about an effective educational program. In drafting the overall dissemination plan, it is important to identify those who may be interested in the program, as well as those who can help reach potential users. In drafting the overall awareness plan, it is necessary to determine what kinds of information potential users need, how to present that information, and how to get it into their hands.

To develop this overall awareness plan and to enable project staff to carry it out, consider

- the awareness materials needed to enable potential users to learn about the program: the brochures, booklets, press releases, descriptions, transparencies, slide/tape presentations, filmstrips, films, or videotapes that must be written, designed, produced, and distributed
- the awareness activities needed to enable potential users to learn about the program: the workshops, conferences, mailings, demonstrations that must be planned and carried out
- existing instructional and management materials that can be used with recipients of awareness materials and participants in awareness activities as is, unchanged; materials that can be used if changes are made; materials that have to be developed from scratch
- steps that will have to be taken to organize project facilities to accommodate visitors who wish to see the program in action at the development site

All of the items described on the pages that follow are awareness materials that you may want to prepare.

| ITEM | one-page program description |
|---|---|
| AUDIENCE | potential adopters, facilitators, other intermediaries, important district officials |
| PURPOSE | To give interested groups a concise overview of an educational program. |
| CONTENT | Every project approved by the Joint Dissemination Review Panel has prepared a ten-page submission describing the project, its program, and its claims of effectiveness. When a project receives Panel approval, the Department of Education's public affairs officer prepares and circulates a multipage press release describing the project. For every project approved by the Panel, a one-page description of project activity and program structure is prepared for *Educational Programs That Work*, an annual catalog of JDRP-approved programs sponsored by the Division of Educational Replication, Department of Education, for the National Diffusion Network. All JDRP-approved projects receive a copy of their catalog description and their press release, which they may reproduce. Even when project-developed materials exist, copies of the catalog description are useful and cost-effective awareness tools. Otherwise, use the ten-page JDRP submission, the press release, and the catalog page to draft a one-page description highlighting target audience; program goals; project philosophy, history, and organization; program structure, materials, and methods; evidence of program effectiveness; implementation requirements; financial requirements; services; contact person, address, and telephone number. |
| FORMAT | One 8½ x 11 inch sheet. Display project title and logo. Back of sheet can be used for other information, such as a list of materials or demonstration sites. Project stationery may be used if appropriate. May be typewritten or typeset, reproduced by office copier or offset printing. Pay attention to quality of reproduction: recipients often make copies. |
| LIFE EXPECTANCY | One year, or as required by changes. |
| DISTRIBUTION | To potential adopters: in person or by mail.<br>To facilitators: by mail. |
| QUANTITY | Two hundred copies, until demand can be judged and revisions made as determined by use. |

| ITEM | awareness brochure |
|---|---|

**AUDIENCE**

potential adopters, facilitators, other intermediaries, important district officials

**PURPOSE**

To provide basic information about an educational program to as many different types of people as possible—teachers, administrators, school board members, parents, coordinators; to describe a regular project activity or to advertise a special project-sponsored activity or event; to identify as potential adopters and/or participants those who request further information or who indicate interest in a project-sponsored activity.

**CONTENT**

A brochure that provides basic information about a project and its program to an extended audience will highlight

- target audiences: who benefits by the program
- program goals: why the program was developed; what it intends to accomplish
- basic features: content area or management concern; objectives within this area or concern; materials and methods used to attain these objectives; staff involved in an adoption; others affected by adoption
- project history: when and where the program was developed; by whom; sources of developmental funding; sites, staff, and learners involved
- evaluation results: format and date of testing; tests used; results indicating learner gains, stated in lay terms
- adoption requirements: what adopters must provide, obtain, and do to use the program with similar success
- services available to potential adopters (for example: needs assessment, assistance in writing funding proposals) and to adopters (for example: preservice training, follow-up inservice training, monitoring, evaluation, other consulting)
- contact person, complete mailing address, and telephone number

A brochure can also be used to advertise special events or publicize regular program activities. In either case, present details concisely, accurately, interestingly. Any special event or regular activity announcement should also contain a brief program overview.

One way to identify potential adopters or participants is to design a portion of the brochure for use as a tear-off return mailer. Returned mailers can be used to assess the appeal of the program or the effectiveness of the brochure. Coding brochures to identify the activity where they were used (if distributed in person) or the recipient (if distributed by mail) can help in assessing the cost-effectiveness of that strategy. Returned mailers can also form the basis of future mailing lists.

**FORMAT**

Many variations exist, but the least expensive and most common sizes are 8½ x 11 inch (standard business size) or 8½ x 14 inch (legal size) sheets, 20-pound paper or heavier, coated or bond, folded two or three times to 8½ x 3½ inches to fit a #10 (standard business size) envelope.

If brochure is mailed without an envelope, one of the panels must be set aside for the address. Include the project return address in the upper left-hand corner of this panel, area for the address or an address label in the center, and postal indicia or space for a postage stamp or postage meter imprint in the upper right-hand corner. Making the brochure a self-mailer saves cost of envelopes and time spent stuffing them not only for project staff but for others who distribute information.

If brochure is designed to obtain requests for further information about the project, specific aspects of the program, or project-sponsored activities (awareness presentations, site visitations, training workshops) or to preregister participants for special events, paper weight must meet Postal Service requirements for post cards (currently cover stock weight); one panel no smaller than 3 x 5 inches (regulation Postal Service size for 10-cent post card) should contain respondent options on one side and project mailing address on the other; if return postage is paid by the project, include postal indicia in upper right-hand corner of address side of return card.

Professional graphic artist recommended for layout.

LIFE EXPECTANCY

One year for an all-purpose awareness brochure. (As your dissemination effort is refined, you may need to revise the brochure less often.)
Limited to date of event for a special event brochure.

DISTRIBUTION

Varies with purpose of brochure.
An all-purpose brochure may be distributed

- to facilitators, education association officials, and those who request information: by mail
- to visitors, participants in project-sponsored activities, awareness conference participants, parents, and community members: in person
- to other potential adopters: through NDN facilitators and other facilitators and intermediaries, including federal and state coordinators, Department of Education officials
- indirectly, as a handout at conferences and workshops project staff do not attend

If the brochure describes a regular project activity or a special event, it is best distributed directly, by mail, to a predetermined list of potentially interested people. By supervising your own distribution, you will know that intended participants receive timely notice.

QUANTITY

Varies with number of projected activities, availability of low-cost printing facilities to handle reruns, potential time delays involved in securing permission to reprint and scheduling printer, and time remaining before next update. Consider a print run of no fewer than 5,000 copies for minimal cost economies.

| ITEM | list of services |
|---|---|
| AUDIENCE | potential adopters, adopters, facilitators, other intermediaries |
| PURPOSE | To provide interested parties with exact and detailed information on services to adopters and potential adopters, with costs for each. |
| CONTENT | List the services provided by the project to adopters and potential adopters in the following order:<br>• awareness (are project staff prepared to organize awareness presentations for local educators? to make presentations at awareness meetings or conferences organized by others? are project staff willing to go outside the immediate area? out of state?)<br>• needs assessment (can project staff help potential adopters perform needs assessments?)<br>• proposal writing (can project staff help potential adopters write proposals for funding to underwrite adoption?)<br>• preservice training (is training required for adopters before program is installed? is training provided at the adopter's site? at the project site?)<br>• inservice training (is training required for adopter staff after the program is installed? is training provided at the adopter's site? at the project site?)<br>• monitoring (can project staff help adopters to monitor the program as installed?)<br>• evaluation (can project staff help adopters to evaluate the program as installed?)<br>• do project staff provide other services? other help after program is installed?<br><br>The list should identify the location(s) where services are provided: project site? adopter's site? both? somewhere else? State costs exactly, for as many different situations as occur; where services are provided at more than one location, state costs for each. Projects often require adopters to pay some or all costs of travel to and from the adopter's site. Travel costs may or may not include per diem allowance. Some projects require an honorarium as well. If some costs can be underwritten under certain circumstances, that may be indicated, but it must not replace a complete and exact statement of the unsubsidized cost of each service. |
| FORMAT | One or more 8½ x 11 inch sheets. Display project title and logo prominently. Project stationery may be used if appropriate. If content fits on a single page, back of sheet can be used for other information, such as project description or list of materials. May be typewritten or typeset, reproduced by office copier or offset printing. Pay attention to quality of printing: recipients often make copies. |
| LIFE EXPECTANCY | Indefinite. List must be revised if changes occur. |

DISTRIBUTION

To potential adopters: in person or by mail.
To facilitators: by mail.

QUANTITY

Two hundred copies, until demand can be judged. Keep the inventory small, as changes may be frequent. If the supply gets low, reproduce high-quality original on office copier.

| ITEM | list of materials, equipment, facilities |
|---|---|
| AUDIENCE | potential adopters, adopters, facilitators, other intermediaries |
| PURPOSE | To provide interested parties with exact and detailed information on materials, equipment, and facilities required for adoption, with the costs for each. |
| CONTENT | List the materials, equipment, and facilities required for program installation. The list of materials that all JDRP-approved projects prepare for the NDN *Materials Inventory* could be reproduced, or its content could be adapted if another format is preferred. The *Materials Inventory* list mentions the source for each item; if materials are commercially produced, an interested school can check to see if it has them. If the list is prepared from scratch, itemize the materials, equipment, and facilities required for program installation in the following order:<br>• awareness materials: print and audio-visual<br>• instructional materials: student and teacher—if the list is long, it should be broken down by grade level<br>• materials for evaluating student progress<br>• management materials: program manager's manual, materials for monitoring and evaluating project as implemented<br>• facilities necessary for operation of program: classrooms, meeting rooms, office space, learning center or laboratory, learning carrels, transportation—whatever is required<br>• special equipment<br><br>State costs as exactly as possible. When listing materials, note what is available free, and in what quantity. For materials distributed at cost, give rates for single copies and for bulk orders if they differ.<br><br>If your program is complex and various adoption options are possible, you may want to consider formulating a "bare-bones" list, a medium-price list, and a "luxury-option" list. |
| FORMAT | One or more 8½ x 11 inch sheets. Display project title and logo prominently. Project stationery may be used if appropriate. If content fits on a single page, back of sheet can be used for other information, such as project description or list of services. May be typewritten or typeset, reproduced by office copier or offset printing. Pay attention to quality of printing: recipients often make copies. |
| LIFE EXPECTANCY | Indefinite. List must be revised if changes occur. |
| DISTRIBUTION | To potential adopters and adopters: in person or by mail.<br>To facilitators: by mail. |
| QUANTITY | Two hundred copies, until demand can be judged. Keep the inventory small, as changes may be frequent. If the supply gets low, reproduce high-quality original on office copier. |

| | |
|---|---|
| ITEM | **list of demonstration sites and qualified trainers**<br>(see paragraph "Training," p. 78) |
| AUDIENCE | potential adopters, facilitators, other intermediaries |
| PURPOSE | To inform interested parties of locations where the program can be observed in operation and of persons qualified to train others in use of the program. |
| CONTENT | Lists of sites and trainers may be separated or combined. Organize list of demonstration sites by state, county, and city. Identify dates and times when visitors are welcome. Organize list of qualified trainers by state. After the trainer's name, give any special qualifications and identify restrictions limiting trainer's ability to travel and the expenses involved— travel? per diem? honorarium? |
| FORMAT | One or more 8½ x 11 inch sheets. Display project title and logo prominently. Project stationery may be used if appropriate. If content fits on a single page, back of sheet can be used for other information, such as list of materials or list of services. May be typewritten or typeset, reproduced by office copier or offset printing. Pay attention to quality of printing: recipients often make copies. |
| LIFE EXPECTANCY | Indefinite. List must be revised if changes occur. |
| DISTRIBUTION | To potential adopters and adopters: in person or by mail.<br>To facilitators: by mail. |
| QUANTITY | Two hundred copies, until demand can be judged. Keep the inventory small, as changes may be frequent. If the supply runs low, reproduce high-quality original on office copier. |

| ITEM | detailed program description |
|---|---|
| AUDIENCE | potential adopters who express serious interest, facilitators |
| PURPOSE | To provide a comprehensive description of the project and detailed information on steps involved in adoption. |
| CONTENT | Content and organization is similar to awareness brochure and one-page description, but information is more detailed. Additional topics to include:<br>• a concise summary of project objectives and activities<br>• intended outcomes for adopters<br>• project-developed criteria for selecting adopters<br>• a comprehensive list of personnel required for adoption<br>• a detailed breakdown of steps involved in adoption, with time required for each<br>• guidelines for estimating costs and preparing a budget<br>• a comprehensive list of required and optional materials, equipment, facilities needed for adoption<br><br>Figure on one double-spaced page for each topic.<br><br>To avoid having to revise and reprint the booklet, do not include costs, which often change. |
| FORMAT | 8½ x 11 inch sheets, or 11 x 17 inch sheets folded to that size, with a cover of heavier stock, stapled or saddle stitched.* For a smaller book, use 8 x 14 inch or 11 x 17 inch sheets and reduce to 8½ x 11 inch format or smaller. Display project title and logo prominently. May be typewritten, typeset, or typewritten with typeset heads, reproduced by office copier or offset printing. If expense is no object, informative photos and other well-produced graphics may be included. |
| LIFE EXPECTANCY | Indefinite. Basic features of program and requirements for adoption should not change much. A first version should be prepared as a trial document; reviewers' comments should be used to prepare the final version. |
| DISTRIBUTION | To potential adopters: in person or by mail.<br>To facilitators: by mail. |
| QUANTITY | Depends on several factors: number stipulated in your dissemination grant, conditions and activity in your state, planned use for the booklet (whether to be mailed or carried to conferences as a handout). Two hundred copies is a safe preliminary estimate. |

* With the saddle stitch method of binding, staples are inserted through the center fold.

| ITEM | evaluation results |
|---|---|
| AUDIENCE | potential adopters, facilitators, other intermediaries |
| PURPOSE | To provide a comprehensive statement of student gains. |
| CONTENT | In addition to results of evaluation, identify evaluation design (pre- and post-tests? control groups?), tests used (commercial tests? project-developed instruments?), and dates administered. The ten-page JDRP submission contains extensive material on evaluation design and results which could be used as is, or abstracted. However, as a rule this material is highly technical. Teachers and school administrators without special training in statistics may not know what the technical terms mean or what significance the numbers have for concrete situations confronting them. Keep this in mind when determining how to present evaluation results. State significance of evaluation results in a summary paragraph. This paragraph could also be used for the detailed project description. |
| FORMAT | One or more 8½ x 11 inch sheets, as required. Certain information may best be presented in tabular or graphic form. Design tables and graphs for clarity and legibility. Text may be typewritten or typeset. Report may be reproduced by office copier or offset printing. |
| LIFE EXPECTANCY | Indefinite. Information will not change unless more evaluation is conducted. |
| DISTRIBUTION | To potential adopters: in person or by mail.<br>To facilitators and other intermediaries: by mail. |
| QUANTITY | Fifty copies, until demand can be judged. |

| ITEM | press release |
|---|---|
| AUDIENCE | local media, potential supporters of program adoption |
| PURPOSE | To create broad-based interest in an educational program; to create broad-based support for program adoption among parents, school board members, and taxpayers. |
| CONTENT | By definition,[1] a press release is an article written in tight, direct style that can be used as is by the media outlet to which it is addressed. The content is news—an event or activity that interests many people, either because it directly affects the local community or because it involves local people. Use the news angle to highlight program innovations and program effectiveness. Emphasize human interest and program benefits. Have someone with professional journalistic experience write the actual release. |
| FORMAT | Typewritten, double-spaced, on *one side only* of 8½ x 11 inch sheets; allow 1 inch margins on all sides. Number the pages; precede page numbers with a keyword (for example, "Project NAME: Page 1"). At the bottom of every page put the word "More" and the keyword, between parentheses. On the last page use some kind of symbol (such as -30-, #, or the writer's initials in lower case) to indicate the end of the release. At the top of the first page, give the date the release is sent, the title of the project sending the release, the release date (usually immediate), and the words "PRESS INFORMATION" followed by the name of a person who can be contacted, an address, and a telephone number. |
| LIFE EXPECTANCY | As required by events. |
| DISTRIBUTION | To local media—newspapers, radio and television stations: by mail. |
| QUANTITY | One per contact. |

[1] Adapted from Helen Farlow, *Publicizing and Promoting Programs* (New York: McGraw-Hill, 1979), pp. 36, 40, 61–64.

| ITEM | quarterly bulletin |
|---|---|
| AUDIENCE | adopters, facilitators, other intermediaries, DER or other funding agency staff, state education agency personnel |
| PURPOSE | To maintain contact with and among adopters. To provide adopters and others with news of project activities. To inform adopters and others of project changes. |
| CONTENT | Project bulletins accommodate a wide range of contents: news of new adoptions, news of success from past adoptions, scheduled awareness and training activities, reports in the press on the project and/or adopters, achievements by project staff, changes in staff, extensions or limitations on project activities and services. Bulletins can also be used to solicit ideas from adopters, to mobilize adopters and other interested groups for action, and to give potential adopters acknowledgment and support. |
| FORMAT | Depends on volume of information, but best limited to one sheet 8½ x 11 or 11 x 17 inches, folded. Bulletin can be designed to be mailed under cover (more costly) or as self-mailer (less costly). Size of page should be determined with mailing in mind. Copy may be typewritten, typeset, or typewritten with typeset heads. (Typeset heads can be reused from issue to issue.) May be illustrated with line art or photographs. Best printed by offset. |
| LIFE EXPECTANCY | Project bulletins should be issued no more than quarterly, unless amount of real news to be reported is considerable. |
| DISTRIBUTION | To adopters, NDN facilitators, other facilitators, funding agency, state education agency personnel: by mail. |
| QUANTITY | Determined by distribution. |

## INSTRUCTION

Instruction is any activity organized or conducted by teachers or other staff for the benefit of students. Instructional materials include all items required for such activity. Materials for teachers include instructor's manuals, curriculum guides, lesson plans, and directions expressly for teachers and other instructional staff. Some projects may require separate guides for other persons whose responsibilities are related to instruction, such as learning coordinators, experience site analysts, and guidance counselors. In any case, every product should have clear, exact, and complete directions for performing every activity described. Student materials may include general directions, activity outlines, readings, worksheets, tests, and forms expressly for student use, as determined by program philosophy, objectives, and organization. All materials for students should be age- and/or level-specific. When instructional materials are reviewed to determine their suitability for use by others, references to local settings and conditions should be eliminated.

| ITEM | student materials |
|---|---|
| AUDIENCE | adopter's students |
| PURPOSE | To complement instruction, guidance, and other instructional activities. |
| CONTENT | Determined by content area or management concern and by program goals, approach, and methods. Student materials, including readers, workbooks, activity sheets, and learning games, may be packaged as grade- or age-level manuals (if content is segmented and sequenced or if instruction is programmed) or as individual self-contained units, as dictated by approach. Whether students use the materials on their own or under the direction of instructional personnel, simple, clear, and explicit instructions on use of the materials should be included. Save on costs by separating nonconsumables (instructions, resource materials) from consumables (activity sheets, answer sheets). Tests or other required student evaluation materials should be either included in or supplied with student materials, or explicit instructions on test construction should be given in the instructor's manual. However, tests should not be included with instructional material unless administered under open-book and untimed conditions. |
| FORMAT | Dictated by content, instructional approach, packaging, and consumable/nonconsumable nature of the material. Twenty-pound bond paper is acceptable for nonconsumable items and elements. Text may be typewritten or typeset (typewritten if materials will undergo revision). Materials may be reproduced by mimeograph, office copier, or offset printing. When instructional materials are packaged as self-contained units, different production options may be used for different package elements (typeset text for resource materials and instructions, typewritten text for response materials). High-volume consumables (activity sheets, tests, other student evaluation forms) may be supplied to adopters as masters, to be reproduced at the local site, or as pads. Finishing and binding options depend on the physical character of the material. Certain materials, such as learning games and manipulatives, demand careful consideration of the container needed for transportation and storage. |
| LIFE EXPECTANCY | Consumables: one time only.<br>Nonconsumables: one to three years, depending on nature of use, frequency of use, and student habits. |
| DISTRIBUTION | To adopters. Typical examples of instructional materials (pages from readers, sheets from workbooks, worksheets) or a typical packet (if materials are packaged as self-contained learning modules) may be circulated to facilitators and other intermediaries and to potential adopters as part of the awareness effort. |
| QUANTITY | Readers and workbooks: one per student, or as required.<br>Reproducible consumables: one master per piece.<br>Games and manipulatives: one set per grade or age level, or as required.<br>Shelf inventory: to be determined by number required for adoption and number of planned adoptions.<br>Sample materials: fifty sets, until demand can be judged. |

| ITEM | instructor's manual |
|---|---|
| AUDIENCE | adopter's instructional staff |
| PURPOSE | To provide teachers and other instructional personnel with guidance and support for conducting instruction. |
| CONTENT | Whether providing guidance for instruction at a single grade level or for a whole program, an instructor's manual should include<br>• a short statement of program philosophy<br>• an overview of the project-developed instructional approach, general method, and specific techniques, with their rationale and an explanation of the relation between program philosophy and instructional approach and techniques<br>• an outline of the course (if more than one unit is included) or program (if more than one level is included) showing how successive units or levels build on preceding units or levels<br>• an overview of program organization and structure, accomplished through narrative, diagrams, or both<br><br>Depending on the nature and complexity of the instructional program, an instructor's manual may also include<br>• complete or sample lesson plans, with detailed instructions for their construction and use<br>• complete or sample sets of project-developed student materials<br>• sample sets of teacher-prepared student materials, with instructions for preparation and detailed instructions for use<br>• instructions for adaptation of commercial materials, if these are used in the project-developed instructional program<br>• complete sets (if provided by developer) or sample sets (if prepared by adopting teacher) of student tests, with explicit directions for test construction, instructions on conduct of testing, and answer keys or suggested answers, as required. |
| FORMAT | A multipage book or booklet: 8½ x 11 inch sheets punched for standard three-ring looseleaf binder, or sheets the same size or smaller, stapled, saddle stitched, or plastic or spiral-bound (depending on thickness of publication). Use inexpensive binding methods until materials are in final form. |
| LIFE EXPECTANCY | One year initially as trial document; multiyear after product is in final form. |
| DISTRIBUTION | One copy per instructor.<br>Copies of instructor's manuals may be circulated by mail to facilitators and other intermediaries maintaining resource files and to potential adopters as part of the awareness effort. |
| QUANTITY | To be determined by number of instructors per adoption, manuals required per instructor, and planned adoptions. |

## TRAINING

Training includes the activities that will enable staff at adopting schools to use a new program at their location without difficulty. The amount of training required and its precise sequencing will depend on the number of different positions involved, the number of persons needed to staff them, the involvement of administrators in conducting the program, and the complexity of program operations. In any event, one or more members of the originating project staff must be designated primary trainers. Later, when the project's dissemination activities become more refined, the project may extend its training by identifying people in other locales as qualified trainers. This extension will not affect the basic nature of the materials required.

Training materials/manuals are outlined here. However, experienced project staff recommend that formal materials be prepared only when some experience with the training process has given your staff a firm idea of what is required and when.

| ITEM | training manual |
|---|---|
| AUDIENCE | trainers and trainees |
| PURPOSE | Trainers: to guide project staff in conducting training activities for adopting personnel.<br>Trainees: to complement or supplement training conducted by project staff.<br>Both purposes may be met in a single product, or separate manuals may be issued. |
| CONTENT | Manual for trainers provides the content of training, in outline or detail; contains training sequence and suggestions on how to conduct training session/activity; includes copies of or references to all materials used in training, whether by trainer or by trainee— text of overhead transparencies, explanatory handouts, activity worksheets, schedules, participant questionnaires (whether used as a training or evaluation tool), with answer keys and scoring guides where applicable.<br><br>Manual for trainees provides only the content of training; includes copies of or references to all materials used by trainees; should be planned as a possible reference after training is completed.<br><br>Successful training emphasizes the fundamental conceptual and practical aspects of the program: the philosophy and goals, the materials to assist in achieving the goals, the procedures required for effective use of the program. Successful trainers make a special point of linking their program to current practices, showing where differences exist and indicating how project-developed materials and procedures can be adapted to local conditions.* |
| FORMAT | A multipage book or booklet: 8½ x 11 inch sheets punched for standard three-ring looseleaf binder, or sheets the same size or smaller, stapled, saddle stitched, or plastic or spiral-bound (depending on thickness of publication). Use inexpensive binding methods until the product is in final form. |
| LIFE EXPECTANCY | One year initially as trial document; multiyear after product is in final form. |
| DISTRIBUTION | Trainer's manual: one copy, before training.<br>Trainee's manual: one copy, during training.<br>If formal sessions are not conducted: by mail.<br>Supply copies on request to intermediaries who maintain information centers. Potential adopters may want to review all project materials before making decision to adopt. |
| QUANTITY | Varies with volume of projected training activities: project staff involved in training; minimum number of trainees per training session or per adoption; projected number of training sessions or adoptions. Print run should be small until product is in final form. |

* Paragraph adapted from John A. Emrick, Susan M. Peterson, and Rekha Agarwala-Rogers, *Evaluation of the National Diffusion Network, Volume 1: Findings and Recommendations* (Menlo Park, Calif.: Stanford Research Institute, 1977), pp. 82–83, ERIC # ED 147 327.

## MANAGEMENT

Program management involves a wide variety of tasks required to install and operate a program. Management materials provide information and guidance on such issues as selection of project staff, use of paraprofessionals and volunteers in project activities, use of community resources in program operation, training for project staff, staff responsibilities, establishment and maintenance of strong staff relationships, budgeting, accounting and documenting procedures, student selection and scheduling, development and maintenance of comfortable community relationships, and monitoring and evaluation procedures. Existing management materials, including schedules and timelines, staff development programs, and budgeting methods, should be reviewed to determine their suitability for use at other locations and revised or supplemented as needed. One useful tool is an implementation timeline, which identifies tasks and time required and includes space for calendar dates, to be supplied by adopters. Internal management forms described in this section are used in needs assessment, information gathering, adoption monitoring, record keeping, documentation, and evaluation. Facilitators and other intermediaries, including state content area coordinators and Title IV-C coordinators, may require you to prepare other internal management forms not described here. Maintain a file of the forms that you produce, and be prepared to cut, paste, and rewrite portions of existing materials to meet unforeseen purposes.

| ITEM | project manager's manual |
|---|---|
| AUDIENCE | director at adopting site |
| PURPOSE | To give directions for organizing and managing implementation of the program at an adopting site. |
| CONTENT | Project manager's manual includes<br>• an overview of program philosophy, goals, and general atmosphere; relationships amoung all participating personnel; and project director's role and responsibilities<br>• a sequenced calendar checklist of tasks to be performed, separated into start-up tasks, continuing tasks, and tasks to be introduced as implementation proceeds<br>• instructions on student selection and scheduling<br>• instructions on staff selection and training, identifying training needed for each position and when it is to be supplied (preservice? inservice?), and instructions on building good staff relationships<br>• instructions on creating and maintaining comfortable relationships with community and parents<br>• a list of required and optional facilities<br>• budgeting guidelines: a clear outline of costs involved in program operation, noting options and maximum/minimum costs and splitting out facilities, equipment, materials, computer time, transportation fares, staff time, consultant services, and public relations, as required<br>• instructions on evaluation responsibilities, including when and how to conduct evaluation and where to report results<br>• hints on continuation, including making staff changes, retraining, keeping the project "visible" and alive, and finding continuation funding |
| FORMAT | 8½ x 11 inch sheets punched for standard three-ring looseleaf binder to allow additions, changes to be made at low cost. |
| LIFE EXPECTANCY | Indefinite. |
| DISTRIBUTION | One per adopting project: at formal training session.<br>Copies of project manager's manual may be circulated by mail to facilitators and other intermediaries maintaining resource files and to potential adopters as part of the awareness effort. |
| QUANTITY | To be determined by number of planned adoptions. |

| ITEM | internal management forms* |
|---|---|
| AUDIENCE | staff at home site and adopting site |
| PURPOSE | To establish and maintain relations with adopter and to facilitate internal management and evaluation. |
| CONTENT | A *needs assessment* form can be used to determine the degree of match between the program and needs of potential adopters.<br><br>A *preworkshop information-gathering* form can help to determine the needs of participants in a particular awareness or training session, thus permitting the presentation to be tailored to that audience. It can also be used to preregister participants so that the number of sessions and presenters or trainers needed and the materials, supplies, and facilities required can be determined.<br><br>An *adoption agreement* or *implementation plan* includes a statement of purpose or intent; identifies the parts of the program that an adopter agrees to implement; specifies who does what, where, and when; and provides space for the signatures of responsible officials.<br><br>*Monitoring* forms may be used to determine whether implementation is proceeding successfully and to identify areas where help may be needed. At a more general level, response from monitoring forms may be used to improve adoption strategies. Forms should be easy to fill out: checklists and yes/no or rating-type responses are preferred.<br><br>Project *record-keeping* and *documentation* forms are used to record contacts with potential adopters, adopters, and facilitators and other intermediaries. Forms to log visitors, telephone calls, awareness session participants, requests for information, and correspondence should provide space to note the date on which communication or activity took place, staff involved, nature of the communication or activity, results, and follow-up required.<br><br>Every project-developed *evaluation* form should clearly define the intent of the evaluation and identify when data are to be collected. This is true whether the form is intended to determine the impact of long-range treatment (student gains, instructor skill acquisition, successful implementation) or of specific activities (awareness presentations, site visits, training workshops) or to monitor activity on an ongoing basis and reveal needs for redirection, further training, or troubleshooting. |
| FORMAT | Plan forms to fit on both sides of a single 8½ x 11 inch sheet. Display project title and logo prominently. Supply adopters with duplicating masters or model. Masters may be reproduced by mimeograph, office copier, or offset printing for forms used often. |
| LIFE EXPECTANCY | Indefinite. |

* For samples of these forms, see ED Materials/Support Center, *Forms and Formalities* (San Francisco: Far West Laboratory for Educational Research and Development, 1978), ERIC # ED 153 662.

DISTRIBUTION — To home site staff: in person.
To adopting site: in person or by mail.

QUANTITY — To be determined by the activity and its frequency. Take into account the number of awareness presentations, training workshops, and adoptions planned or scheduled over several months.

| ITEM | community resource guide |
|---|---|
| AUDIENCE | staff at adopting site |
| PURPOSE | To train those responsible for creating and maintaining relationships with the community. |
| CONTENT | A program that makes extensive use of community resources should prepare a guide for adopters to explain the philosophy of community involvement, identify community resources with which working relationships should be established, and describe proven procedures and techniques for creating and maintaining such relationships. Examples of forms you need should be included. |
| FORMAT | 8½ x 11 inch sheets punched for standard three-ring looseleaf binder, stapled, or plastic bound. Copy should be typewritten. Guide may be reproduced on office copier or by offset printing. As this is strictly an internal working document, the cheapest presentable option is advised. |
| LIFE EXPECTANCY | Indefinite. |
| DISTRIBUTION | To adopter: in person or by mail. |
| QUANTITY | To be determined by number of planned adoptions. |

| ITEM | parent guide |
|---|---|
| AUDIENCE | parents |
| PURPOSE | To interest and involve parents in an educational program. |
| CONTENT | A product intended to interest parents in program operations should give in lay terms an overview of program philosophy and objectives. To make clear what the program can do for children, the parent guide should define project goals; to show how the project proposes to reach these goals, the guide should describe program organization, operations, and process. A product intended to involve parents in program operations should outline the activities in which parents are invited or expected to participate. Identify what parents are to do, how they are to do it, and how much time is involved, and include a schedule. |
| FORMAT | 8½ x 11 inch sheets or smaller of 20-pound bond; glued, stapled, or saddle stitched, as determined by thickness; copy typewritten or typeset; with or without illustrations and graphics; reproduced by office copier or offset printing, as determined by available time, energy, ideas, and money. |
| LIFE EXPECTANCY | Indefinite. |
| DISTRIBUTION | To parents: in person, at conferences and meetings, or by mail.<br>Copies of parent guide may be circulated by mail to facilitators and other intermediaries maintaining resource files and to potential adopters. |
| QUANTITY | To be determined by distribution. |

# *Recommended Reading for Diffusion and Packaging*

Association for Educational Communications and Technology. *How to Produce Newsletters.* Washington, D.C.: Association for Educational Communications and Technology, 1979.

A practical guide for the novice and the experienced.

Baldridge, Victor, and Robert Burnham. "Organizational Innovation: Individual, Organizational, and Environmental Impacts." *Administrative Science Quarterly*, vol. 20, June 1975, pp. 165-176.

A study to determine the characteristics of those organizations most likely to adopt innovations.

Berelson, Bernard, and Morris Janowitz (eds.). *Reader in Public Opinion and Communication.* Second Edition. New York: Free Press, 1966.

A collection of traditional readings, well worth reviewing.

Berman, Paul, et al. *Federal Programs Supporting Educational Change.* (Vol. IV: The Findings in Review.) Santa Monica, Calif.: Rand Corporation, 1975.

A change-agent policy study of problem-solving motivation, federal monitoring, local institutional settings, project characteristics, implementation outcomes, and more.

Brigham, Nancy. *How to Do Leaflets, Newsletters, and Newspapers.* Somerville, Mass.: New England Free Press, 1976.

Includes ideas for scheduling, layout, paste up, and editing, along with a useful index of terms.

Brodinsky, Ben. *An Idea Book for the Education Editor.* Glassboro, N.J.: Educational Press Association of America, Glassboro State College, 1974.

Writing style, working with printers, distribution and mailing, the idea behind the newsletter, and more.

Burke, Clifford. *Printing It!* Berkeley, Calif.: Wingnow Press, 1974.

(Subtitled A Guide to Graphic Techniques for the Impecunious.) Written for the novice printer, but contains solid help in using the offset method of printing to produce anything from a poster to a complete book.

Craig, James. *Production for the Graphic Designer.* New York: Watson-Guptill, 1974.

Packed with illustrations, charts, and an extensive glossary, fully explains the production of printed matter; one of the best of its kind.

Eastman Kodak Company (ed.). *Help Your Community....Through Photography.* Rochester, N.Y.: Eastman Kodak, 1973.

Useful text for those planning to use photos for publicity, fund-raising, and other facets of public service.

Eastman Kodak Company (ed.). *Planning and Producing Slide Programs.* Rochester, N.Y.: Eastman Kodak, 1975.

A simple introductory paperback.

Farlow, Helen. *Publicizing and Promoting Programs.* New York: McGraw-Hill, 1979.

A step-by-step guide for professionals, semiprofessionals, and volunteers involved in publicizing continuing education programs.

Ford, John H., et al. *A Guide to Developing Educational Products.* Andover, Mass.: The NETWORK, 1978.

A systematic approach that identifies the important steps and critical decision points.

Giacquinta, Joseph B. "Status Risk-Taking: A Central Issue in the Initiation and Implementation of Public School Innovations." *Journal of Research and Development in Education,* vol. 9, no. 1, 1975.

Why participation works, why it doesn't always work, and why innovations are often watered down rather than adopted intact.

Gilmour, F. T. *A Guide to Making a Display.* Williamsport, Penn.: Research and Information Services for Education, Williamsport Area School District.

Practical recommendations on format, construction, mounting, portability, lettering, and other topics.

Havelock, Ronald G. *The Change Agent's Guide to Innovation in Education.* Englewood Cliffs, N.J.: Educational Technology Publications, 1973.

A look at change from within the school system, with emphasis on the administrator's role. (The annotated bibliography, though out of date, is useful for someone new to the field.)

Hurlbert, Allen. *Publication Design: A Guide to Page Layout, Typography, Format, and Style.* Revised edition. New York: Van Nostrand Reinhold, 1971.

Emphasizes mass-circulation magazines, but information presented can be applied to all periodical publishing, regardless of publication purpose, budget, or scale.

Hutchins, C. L. *Educational Development Case Study.* ERIC Document 043 515. 1971.

Documents the planning, development, testing, revision, and production of an elementary science information unit, with cost data and other useful details.

International Paper Company. *Pocket Pal: A Graphic Arts Production Handbook.* New York: International Paper Co., 1979.

Covers art and copy preparation, photography, binding, paper, inks, technical terminology, and other topics; one of the most commonly used guides. Available by mail for $2.25 from International Paper Co., 220 E. 42nd St., New York, NY 10017.

James, C. R., et al. *Developer's Guide: Preparing Materials for Distribution.* Columbus: Ohio State University Press, 1976.

Includes information on selecting and targeting materials, ensuring reproduction feasibility, and complying with legal requirements. Excellent bibliography.

Klein, Susan S. *Toward Consensus on Minimum Criteria for Educational Products.* Paper delivered at annual meeting of AERA, San Francisco, Calif. April 21, 1976.

A discussion of criteria used to make various decisions about types of products — desirability, practicality, intrinsic quality, development, user effects, and spinoffs.

Kotler, Philip. *Marketing for Nonprofit Organizations.* Englewood Cliffs, N.J.: Prentice-Hall, 1975.

Covers market analysis, pricing, distribution, planning and control, and other topics. Perhaps the most useful book a linking agent or change agent can read at the present time.

Laird, Dugan. *A User's Look at the Audio-Visual World.* Fairfax, Va.: National Audio-Visual Association, 1973.

How to select the proper medium, choose a vendor, understand performance standards, handle maintenance, and other tasks. Excellent bibliography.

Lazar, William, and Eugene J. Kelley (eds.). *Social Marketing: Perspectives and Viewpoints.* Homewood, Ill.: Richard D. Irwin, 1973.

Reading chapters three, six, and eight and skimming other chapters (according to personal taste) will give you the basics from this book

*A Manual of Style for Authors, Editors, and Copywriters.* Twelfth edition, revised. Chicago, Ill.: University of Chicago Press, 1969.

One of the most frequently used guides to all aspects of preparing copy.

Melcher, Daniel, and Nancy Larrick. *Printing and Promotion Handbook.* New York: McGraw-Hill, 1966.

How to plan, produce, and use printing, advertising, and direct mail.

Piele, Philip K. *Review and Analysis of the Role, Activities, and Training of Educational Linking Agents.* Eugene, Ore.: ERIC Clearinghouse on Educational Management, 1975.

A discussion of three overlapping types of linking agent. Appendix with several useful sets of references.

Pool, Ithiel de Sola, et al. (eds.). *Handbook of Communication.* Chicago, Ill.: Rand McNally, 1973.

Communication studies for the social scientist. Research-based information on communication systems, persuasion, mass media, public opinion, advertising research, and much more. (More than 1,000 pages of text.)

Rogers, Everett M., and F. Floyd Shoemaker. *Communication of Innovations.* Second Edition. New York: Free Press, 1971.

About diffusion, social change, research traditions, persuasion, rate of adoption, adopter categories, and organizational change.

Sikorski, Linda A., et al. *Factors Influencing School Change.* San Francisco, Calif.: Far West Laboratory, 1976. ERIC Document 129 622.

What research and practice have established about the local change process and special strategies for diffusion and implementation of innovations.

Strunk, William, Jr. *The Elements of Style: With Revisions, an Introduction, and a Chapter on Writing* by E.B. White. Third edition. New York: Macmillan, 1979.

Good advice and concise presentation of basic rules for anyone who wants to write clearly and effectively.

Turnbull, Brenda, et al. *Promoting Change in Schools: A Diffusion Casebook.* San Francisco, Calif.: Far West Laboratory for Educational Research and Development, 1974. ERIC Document 090 679.

Case studies on diffusion of educational innovations showing different approaches to stimulating widespread adoption and use of new programs and products.

U.S. Department of Education. *Educational Programs That Work.* Seventh edition. Washington, D.C.: U.S. Department of Education, 1980. Available from Far West Laboratory for Educational Research and Development, 1855 Folsom St., San Francisco, CA 94103.

Brief descriptive information on projects approved by the Department of Education's Joint Dissemination Review Panel.

U.S. Office of Education. *A Practical Guide to Measuring Project Impact on Student Achievement.* Washington, D.C.: U.S. Office of Education, 1975. Available from Superintendent of Documents stock # 017–080–01460.

Common hazards in evaluation, selecting an evaluation model, securing and analyzing data, reporting results, and other topics.

U.S. Office of Education. *Forms and Formalities: A Resource.* Washington, D.C.: U.S. Office of Education, 1978. ERIC Document 153 662.

A collection of forms, questionnaires, and other materials used by NDN Facilitators and Developer/Demonstrators in their dissemination activites.

U.S. Office of Education. *Transferring Success.* Washington, D.C.: U.S. Office of Education, 1976. ERIC Document 151 949.

A collection of more than 50 case studies, drawn from the experience of those working in the National Diffusion Network, that illustrate change-agent roles and functions.

Watkins, R. W., and C. L. Jenks. *Values and Information: An Approach to Evaluation Planning.* San Francisco, Calif.: Far West Laboratory, 1976. ERIC Document 150 339.

A handbook for adopters (program directors, evaluators, district staff) of Experience-Based Career Education. May prove useful to others as a model or a source of evaluation ideas.

White-Stevens, Lillian. *Guidelines for Writing and Printing Manuals: A Resource Manual for Project Directors and Staff.* Hopewell, N.J.: White-Stevens, Hopewell-Woodsville Road, Hopewell, NJ 98525, 1979.

Covers dissemination materials needed, planning a manual, general organization, printing and binding, publishing, copyright law, and other topics related to publishing for educational dissemination.

Wills, F. H. *Complete Introduction to Fundamentals of Layout for Newspaper and Magazine Advertising, for Page Design Publications and for Brochures.* Translated from the German by Kenneth T. Dutfield. New York: Dover Publications, 1971.

Full of good advice on layout design for newspaper and magazine advertising, page design for publications and brochures, and design of posters and labels.

Zaltman, Gerald, et al. (eds.). *Creating Social Change.* New York: Holt, Rinehart and Winston, 1972.

Selected readings on cause, change agency, change target, and change strategies, as well as on organizing, planning, implementing, and controlling efforts.